



TAPE RECORDING



Mr. Roy Perrin
231 Wildland Ave.
Rutherford, N.J.

Program your family album recordings. See page 18.

*fastest-threading reel
ever developed . . .*



NOW BETTER THAN EVER!

the audiotape C-Slot Reel,

The popular C-Slot reel—the fastest, easiest-threading reel ever developed—has been structurally redesigned. It's now stronger than ever and even more convenient than before.

Since the revolutionary reel design was introduced about a year ago, engineers have carefully checked service experience on all types of machines under all operating conditions. This study pointed the way to still further improvements.

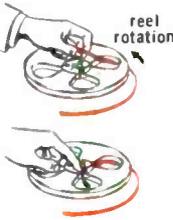
Now, a slimmer, smoother tape slot gives a virtually unbroken hub surface for smoother winding under even the highest tape tension. A reinforced beveled edge guides the tape more easily into the C-slot. Inside the hub, extra "ribs" have been added and the bonding area has been increased by 50%, making the entire structure practically indestructible.

No other reel can approach the C-slot for fast, easy threading. And the new, improved design is now standard for all 5" and 7" reels of Audiotape—an extra-value feature at no extra cost! Another important reason why it pays to specify Audiotape for every recording need.

HERE'S C-SLOT THREADING

1. Insert tape through flange opening at top of C-slot.

2. Drop tape into slot, leaving about 1 inch projecting beyond the hub with tape slack on both sides of recording head.



**THEN PRESS THE
"START" BUTTON!**

Tape will grip and hold firmly . . . no need to turn reel by hand to anchor free end.

audiotape
TRADE MARK

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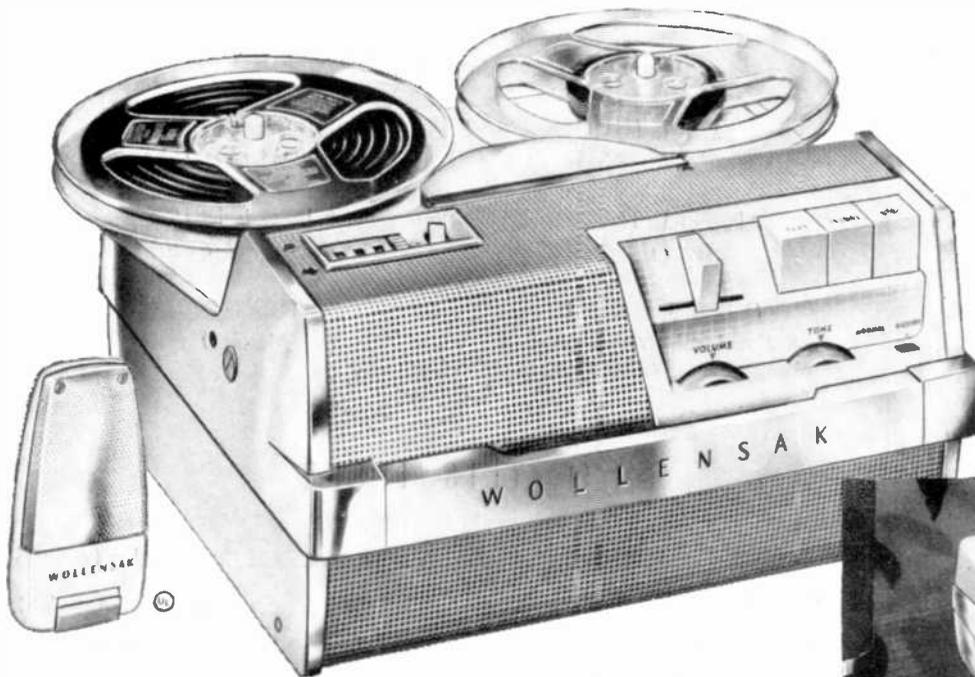
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Cables "ARLAB"

Announcing the Magnificent New

WOLLENSAK "1515"

STEREOPHONIC HI-FIDELITY TAPE RECORDER

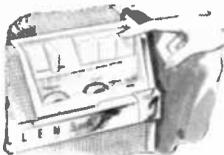
WITH BUILT-IN PRE-AMPLIFIER



The thrilling presence of a live orchestra in your home... full third dimensional sound!



ULTRA LIGHTWEIGHT
Measures only 6½" x 10¼" x 11¾"; weighs scant 20 lbs. Distinguished design harmonizes with every decor.



EASY OPERATION!
Simplified key-board controls. Handy, strikingly beautiful operating panel provides the utmost in operating ease.

ULTRA-POWERFUL!
10 watts push-pull audio output—four times greater than larger, less portable recorders. Ideal for auditorium use.



CONSOLE PERFORMANCE!
Tape live music or use in conjunction with a hi-fi speaker and tuner for a fine hi-fidelity system.

FREE DEMONSTRATION—Your authorized Wollensak Dealer will be glad to show you the "1515" and other fine WOLLENSAK Cameras and Projectors. See him now!

Now you may enjoy the realism of three-dimensional sound in a truly portable stereophonic tape recorder! Two separate *in-line* sound channels bring the living presence of a full orchestra into your home. The upper channel permits you to record and play back monaurally. The lower channel, in line with the upper, plugs in directly to the Phono input of your radio, high fidelity system or your television. No auxiliary pre-amp is necessary as the pre-amp is built right into this WOLLENSAK Tape Recorder. Dual speeds, two-level recording indicator, keyboard controls, index counter, high speed rewind lever, etc. MODEL T-1515, complete with microphone, 2 reels (one with tape), cords, \$229.50

GUARANTEED SPECIFICATIONS Frequency Response—Upper Channel: 40-15,000 cps. \pm 3db. at 7½ ips.; 40-8,000 cps. \pm 3db. at 3¾ ips.; Lower Channel: 40-15,000 cps. \pm 3db. at 7½ ips. (NARTB Standard Equalization). Wow and flutter less than 0.3%; Signal to noise ratio greater than 50 db.; Signal from lower channel pre-amp output 0.5 — 1.5 volts; Crosstalk — 50 db.



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Only 6½" x 10¼" x 11¾"; weighs 20 lbs. 10 watts push-pull output is four times greater than ordinary recorders. "Balanced-Tone" high-fidelity; key-board control. Accepts 7" reels; tape speeds of 3.75 and 7.5 ips.; index counter, etc. Complete with microphone, 2 reels, tape and cords, \$199.50

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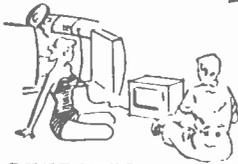
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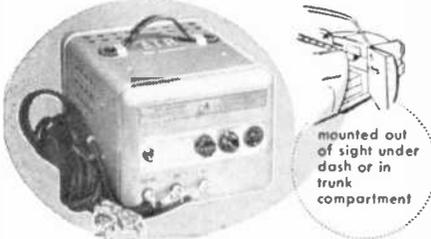


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HI-FI

TAPE RECORDING

VOL. 5 NO. 12

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Insist on Soundcraft Tape... in the new budget-priced Soundcraft Premium Pack... two 7" reels of Soundcraft tape with the "Sweet Moods of Jazz in Stereo" recorded on one of the reels.

ASK ABOUT THESE

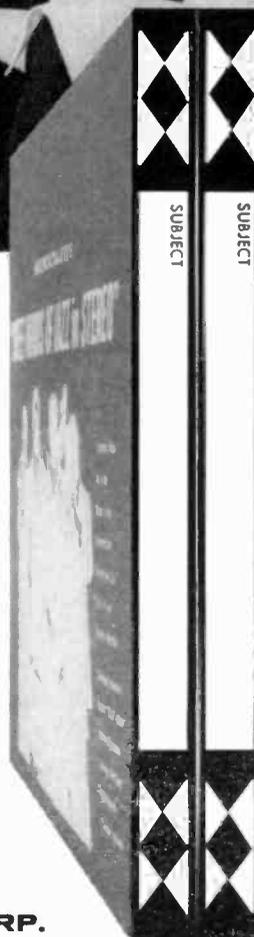
OTHER SOUNDCRAFT PROMOTIONAL RECORDINGS!

"Sounds of Christmas"—traditional Christmas melodies, full orchestra and chorus (monaural only).

"Dixieland Jamfest in Stereo"—a jazz classic with an All-Star combo. Ask your dealer, or write Soundcraft.

REEVES

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**Hear it for yourself in
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 JAZZ IN STEREO"**

...an exclusive new full half hour recording...yours for just \$1.00 extra... when you buy two 7" reels of tape in **SOUNDCRAFT'S NEW**

PREMIUM PACK

containing two reels of Soundcraft tape with "Sweet Moods of Jazz in Stereo" recorded on one of the reels.

"Sweet Moods of Jazz in Stereo" features Coleman Hawkins, "Red" Allen, Marty Napoleon, George Wettling and other jazz greats in memorable interpretations of "Summertime," "Stormy Weather," "Tea for Two" and other old favorites — directed by Larry Clinton, recorded exclusively by Soundcraft...not for sale anywhere else at any price!



Make Christmas fun last through

The wonderful sounds of Christmas merrymaking need never grow old when you record on tapes of Du Pont "Mylar" polyester film.

Here's why: Trouble-free tapes of "Mylar" cannot dry out or become brittle with age . . . offer an extra safety margin against stretching . . . are unaffected by changes in temperature and humidity. What's more, you get 50% or more extra playing time plus superior performance. When you buy tape for your own use or for gift giving this Christmas, be sure to ask your dealer for your favorite brand of tape made with "Mylar".

FOR THE BEST IN TAPE, LOOK FOR



the years . . . on tapes of Mylar[®]

LASTING STRENGTH. Under normal operating conditions, tape of "Mylar" will not stretch or break. There's a 300% margin of safety against stretching offered in no other tape.

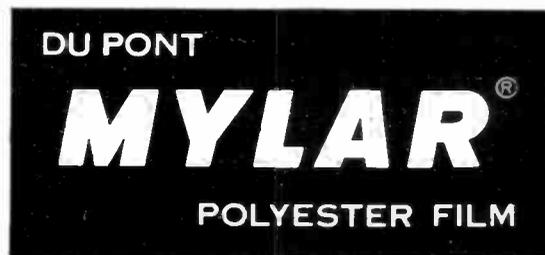
LASTING RESISTANCE TO HEAT, HUMIDITY. Tape of "Mylar" can not dry out or become brittle with age . . . withstands radical changes in heat and humidity. Tape of "Mylar" needs no special storage care.

LASTING FIDELITY. Even after years of playing, tape of "Mylar" has no flattened-out or condensed sounds . . . dimensional stability assures flawless fidelity.



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THE NAME "MYLAR" ON THE BOX



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the incomparable
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STEREO
tape recorders

Ferrograph Stereo equipment is designed to meet traditionally exacting high quality standards.

Two superb models are available:

The Ferrograph Stereo 88 is designed for both recording and playback of stereo tapes. Professional quality twin-recording amplifiers and playback pre-amplifiers are inbuilt. Monaural recording/playback on both tracks is also possible.

The Ferrograph Stereo 35 is designed for the playback of stereo tapes and also offers all the features monaurally of the popular Ferrograph 3A Series. While it is possible to employ auxiliary amplifiers, the Ferrograph "Stere-ad" unit offers the ultimate in matched amplifiers resulting in superb stereo reproduction.

Limited production and heavy demands will delay delivery. See your local dealer and place your order now!

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Here's your complete money-saving guide—see everything in Stereo—choose from the world's largest selection of hi-fi systems and famous name components—save on everything in recording: complete recorders, basic mechanisms, mixers, mikes, heads, phone pickups, tape and accessories. Easy terms available. For everything in Hi-Fi and Recording, for everything in Electronics, get the 452-page 1959 ALLIED Catalog!

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NEW PRODUCTS

BRITISH FI-CORD



Kingdom Products Ltd., 514 Broadway, New York 12, N. Y., is distributing the British Fi-Cord lightweight tape recorder. This machine has speeds of 7½ and 1½ ips, a frequency response of 50 to 12,000 cycles, quick change batteries, rechargeable on all normal A.C. mains, and a noise level of 35 db. Other features include a built-in monitoring speaker, automatically cut-off when lid is closed; automatic erasing with safety control; can be used as transcriber without additional accessories; detachable carrying strap with microphone pocket; and spools of tape packed in ready-to-post economic cartons. For price and additional information on the Fi-Cord, write to Kingdom Products Ltd.

STEREO-ETTE



The Stereo-Ette Co., 4908 N. Lincoln Avenue, Chicago 25, Illinois, has introduced the new "Gold Bug." The manufacturer claims that with this in just a few minutes you can be ready to play stereo discs or single channel monaural records, without adding any extra amplifiers or speakers. All you need are the record player and broadcast radio receiver you already have, and the new "Gold Bug" and stereo cartridge combination, or the "Gold Bug" and your own stereo cartridge. There is no complicated soldering or wiring, and no connection to the radio set. It works

with all broadcast radio receivers, including portables; also works with many nationally-known tape recorders which have stereo heads and pre-amplifiers. Model SDK-101 Stereo-Ette "Gold Bug," designed for use with any ceramic cartridge, less battery and stereo cartridge is priced at \$16.75. Model SDK-102CS, with dual sapphire stereo-monaural turnover ceramic cartridge is \$27.50. For full information, write for Bulletin CS101 to the Stereo-Ette Co.

STEREO AM-FM TUNER

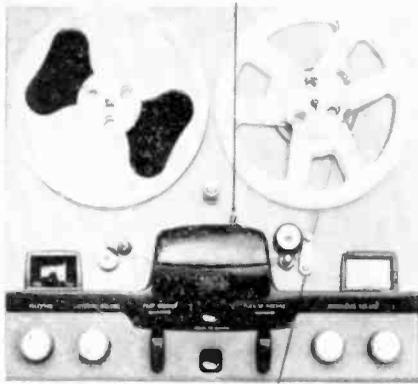


Telematic Industries, 251 Lee Ave., Brooklyn 6, N.Y., has introduced the Telematic Stereophonic AM-FM tuner, ST-666. With this tuner, the problem of obtaining FM classical music, and still being able to obtain AM local broadcasts of rock-and-roll for the junior members of the family is solved. Now, with the purchase of a Telematic stereo AM-FM tuner, together with any small basic amplifier and inexpensive second speaker, both are available. By connecting from the FM output to the main amplifier, and from the AM output to the secondary system, both factions can at once be satisfied. Since both channels are also equipped with individual level controls, each program source can be adjusted to correct volume without affecting the other. Contact Telematic for details and prices.

AMPEX 2 OR 4 TRACK STEREO

Ampex Corporation, 1034 Kifer Road, Sunnyvale, Calif., has introduced its new Universal "A" (900 series) unit which provides either 4-track or 2-track stereo at the flick of a lever. At the 4-track posi-

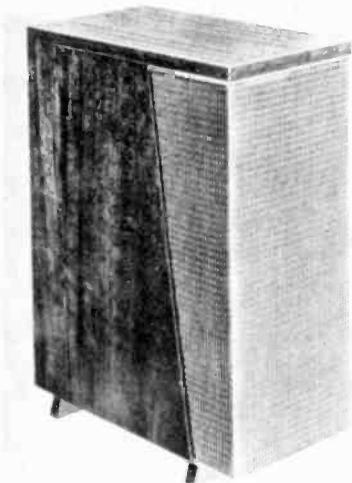
4-TRACK HEAD SHIFT
 "UP" POSITION PLAYS NEW 4-TRACK STEREOGRAPHIC TAPE RECORDINGS
 "DOWN" POSITION PLAYS REGULAR 2 TRACK STEREOGRAPHIC TAPES. ALSO
 PLAYS AND RECORDS MONAURAL TAPES.



AUTOMATIC STOP LEVER

tion you actually get 4 times as much music from any given amount of tape, twice as many tracks at half the speed. The unit also features automatic end-of-reel shut off, and the manufacturer claims performance characteristics at 3 3/4 ips on a par with those normally expected at a speed of 7 1/2 ips. No rewinding is required when using 4-track tape. The Universal "A" (900 series) is now being shipped in all Ampex consoles, modular units, portables, and unmounted tape decks (pictured). For details and price information, contact Ampex.

E-V STEREO SPEAKER



Electro-Voice, Inc., 425 Carroll St., Buchanan, Michigan, has announced a new stereo speaker system, known as the Coronet. The Coronet cabinet alone weighs only 19 1/2 pounds, and is 25 inches high, 9 1/2 inches wide, and 17 3/8 inches deep. This enclosure is available in mahogany, limed oak, and walnut with a formica top. It is also available with a complete 3-way speaker system, which is identified as the Coronet 1A. The 1A comes completely wired and weighs only 38 pounds. Used with another E-V full-range speaker sys-

GUESS WHAT!

We're still not ready to announce what we have been asking you to watch this space for. Monotonous, isn't it? Curious? Satisfaction will bring that crazy cat back any issue now.

REPULSIVE RECORDINGS CO.

tem, the Coronet proves ideal for second-channel stereo reproduction. The Coronet is priced at \$35.50, and the Coronet 1A complete speaker enclosure system sells for \$102. For complete information, contact Electro-Voice.

NEW TURNER MIKE



The Turner Company, 909 17th Street N.E., Cedar Rapids, Iowa, has announced the addition of a new lavalier dynamic mike to its line. This mike, Model 220A, features a unique bass reflex which produces natural low frequency response. It has a frequency response of 60 to 20,000 cps; output level, -90 db for 50 ohm impedance, -84 db for 200 ohm impedance; its case is aluminum with neutral grey non-reflecting enamel finish; and its cable is a 25-foot attached plastic-jacketed 3-conductor shielded one. The price is \$125. For more information write direct to the manufacturer.

STEREO PRE-AMP



Pilot Radio Corporation, Long Island City 1, New York has introduced a new stereophonic preamplifier, Model SP-210. This model features two identical preamplifiers with ganged controls for convenient stereo operation; full range individual bass and treble tone controls, with feedback tone control circuits for low distortion and low output impedance; DC heater supply to all tubes reduces hum to an absolute minimum; high gain which permits use of even the lowest output level magnetic cartridges; twelve inputs; two outputs; frequency response of plus or minus 1 db, 20-20,000 cycles and a tape recording output which has low impedance to permit use of a long cable without affecting the frequency response. This unit sells for \$89.50. Contact Pilot for further details.

**THE PERFECT
 GIFT
 FOR THE TAPE RECORDIST**



TK-4STD

\$12.00 List

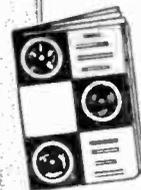
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- ★ GET PROFESSIONAL RESULTS!
- ★ FOR BETTER RECORDINGS!

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ROBINS
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 FLUSHING 54 - NEW YORK

CROSSTALK

from the Editors

* * * * *

FTC GIVING UP efforts to set up rules for Hi-Fi Trade. Trouble lies in the inability of the industry to come up with any agreement on a definition of what hi-fi is. After year of study by FTC attorney, Federal Trade Commission is about ready to throw in the towel. Some definitions were submitted but industry could not agree on them. Perhaps with stereo taking over the way it is, definition of hi-fi at this point would be wasted effort—better the time be expended on definition of stereo before fast buck boys push over fake stereo products on unsuspecting public.

* * * * *

SINGLE CHANNEL STEREO radio transmission is being worked upon by Electric & Musical Industries, Ltd. (EMI) and the British Broadcasting System. New method separates directional information from program material at source. On receiving end, only slightly more complicated radio receiver, uses directional signal to place sound in proper speakers for stereo effect. Only a very narrow part of the band is used for the directional material, leaving almost all of it for the musical signal. System is fully compatible and does not decrease station range or put out two half signals. Called the Percival system, it requires no modifications to transmitter.

* * * * *

MAGNETIC RECORDING INDUSTRY and its dealers had better get hep quickly to recently passed National Defense Education Act. Among other things, \$40,000,000 has been allotted to states on a matching basis for the purchase of training aids for schools. Programs will be administered at state level. Dealers should work with their local school systems to see that tape recorders are well represented in purchases made by schools. Manufacturers had better alert their reps also. The more tape in the schools the better.

* * * * *

THANKS TO ALL you good people who entered our quickie "You be the Editor" Contest. The winners are listed on page 25. Sorry you all couldn't be in the winner's circle.

* * * * *

VIDEOTAPE MACHINES are changing the methods of producing TV commercials. Formerly shot on film, no preview of results was possible for two or three days. If retakes were necessary it meant rounding up actors, rehiring studio facilities, etc. With Videotape, immediate playback is possible. Latest addition to art is the introduction of a splicer to handle the 2 inch wide tape. Principle of operation is exactly the same as splicers we use for regular tape. To emphasize tape's versatility, one commercial was shot in the mountains of California using TV cameras and the signals beamed back to the studio via microwave where it was recorded.

* * * * *

FUTURE OF TAPE for home use borders on fantastic. According to one firm in five years all music will be on tape except pop singles for rock and roll set (or whatever it will be five years from now). Tape may be in magazines instead of reels and music dealers will only stock blank magazines. Music will be recorded on tape from masters in dealers shop. If customer tires of music, magazine can be plugged into duplicating machine, coin inserted and new music will be recorded on his tape. Home video recording will doubtless also make appearance by then. Next step would be a home video camera shooting pictures on tape for playback through TV set. Developments in this direction now in lab stage.

* * * * *

FIRST BREAKTHROUGH for recorded stereo tape comes with announcement by Livingston Audio Products, Caldwell, N. J., that they will make their entire library of 7½ ips tapes, now selling for \$11.95, available at the 3¾ ips speed for \$6.95. Tapes will be packaged exactly as now and be on 7" reels with large diameter hubs. The 3¾ ips tapes will be available in stacked only, for two track machines.

QUESTIONS & ANSWERS

Questions for this department may be sent on tape or by means of a postcard or letter. Please address your queries to, "Questions and Answers," HI-FI TAPE RECORDING, Severna Park, Maryland. The most interesting and widely applicable questions will be used in this department.

Q—A few months ago there was an article in your magazine dealing with the building of a bulk eraser out of a transformer. I used a transformer from an old scrapped radio for the purpose. I followed the directions very carefully but all I can say is that it is a very strong magnet. It does not erase the tape at all.

I made a short recording on new tape and then attempted to erase but I got a tape that I never heard before. I got an echo of the original recording, before and after the original recording, about four of them, I think. It reminds me of these banks of mirrors that one can see himself going into the distance.

I have a Bell deck, the T-200 model and have just secured the second RP-120 preamp so I can record and play stereo. Will it be possible to install four track heads on the deck?—G. W., Wilmington, Cal.

A—When using a demagnetizer or eraser it is necessary that the eraser be removed slowly from the tape to a distance of about three feet before being turned off. This allows the magnetic field to gradually diminish, permitting the tape to align itself at random and thus destroy any signal. Perhaps you have not been withdrawing the magnet or have been using it with DC current which will not provide the random directions to destroy the pattern on the tape.

Actually, this effect of printing with magnetism is rather well known and can be used to some extent as a duplicating process.

Regarding the four track heads, the Bell Company has announced that they will have four track heads available for installation in any Bell deck or recorder if and when the four track tapes become available.

Q—I started subscribing to your magazine just two months ago and I want to express my appreciation for the abundance of information your magazine has to offer.

I bought a Wollensak T-1500 model recorder nine months ago. I record records from a V-M Fidelis and do the playback through the recorder and a home-made Allied Knight Kit, 30 watt amplifier connected to a V-M Fidelis model external speaker cabinet.

Now Wollensak comes out with the T-1515 stereo model recorder which has me all shook up once again about sound.

A dealer said I could convert the monaural recorder to stereo simply by replacing the head with a T1515 stereo head. He says the cost for the stereo head would be about 30 dollars if installed by myself but because of complex technicalities he suggests letting the factory do the job for ten

dollars extra. Is this just an additional sales gimmick? Can this be done with little trouble by a not-too mechanically inclined person?

I notice that the Wollensak factory address is the same as Revere. Are they both made by Revere?—W. N., Chicago, Ill.

A—We doubt that the dealer is throwing an additional sales gimmick your way. He probably does not know your capabilities as a do-it-yourself. If you have put together an amplifier kit you will have no trouble installing a head. Generally the installation is rather simple, the only part of the installation of new heads that requires great care is the alignment and for all practical purposes a test by a good ear will suffice.

While the Revere and Wollensak recorders are made in the same plant, the operations are hotly competitive with separate staffs, each of which tries to outdo the other in quality and quantity.

Q—In your February issue of TAPE RECORDING, you mention a Microswitch which can be used for automatic cut-off when the tape reached the end. You state that a model switch with a roller is available. Please let me know where this switch can be obtained as I have been looking for this very type switch to be installed on my tape deck.—R. H. C., Decatur, Illinois.

A—If your local radio parts house does not stock micro switches we would suggest you contact such firms as Allied Radio, 100 N. Western Ave., Chicago 80 or Newark Electric Co., 223 W. Madison Ave., Chicago 6, Ill. A low pressure type would work the best.

Q—My equipment consists of a stereo recorder and two mikes. In attempts to record a small orchestra I don't get enough of the instruments in the middle. I have considered getting another mike and placing it in the middle to pick up the lost instruments. Would one mike give proper stereo effect when used with other mikes?—R. A. H., Los Angeles, Cal.

A—We believe your problem is one of mike placement rather than number of microphones you use. Try moving them in a bit toward the center and make use of the pattern of sound pickup they have to get the effect you want. Some professional recordings, usually those featuring a vocalist, are made with three track recorders, the third track being mixed with either of the other two when the duplicating master is made.



James Melton makes his tape recordings on

irish
BRAND
ferro-sheen
recording
tape

That's not the reason why you should use

irish
BRAND
ferro-sheen
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TAPE CLUB NEWS

Mrs. Evelyn Pierce, teacher of Jamaica, New York, hopes to carry on her World Tape Pal activities from Germany. She is teaching children of U. S. Air Force personnel somewhere in that country and plans to visit the Brussels world's fair to meet some of her tape pals.

Mrs. Pierce's class at Elmont School has exchanged tapes with Warwick International Club, sponsored by Kenneth deCourcy-Low, Warwick, Australia, and with students of John Hyndman in New Zealand. "The children have enjoyed these exchanges tremendously, and it has been educationally very worthwhile," she reports.

Exchange of tapes among schools is becoming more and more popular, and we would suggest that all school age tape club members mention the idea to their teachers.

Whenever any sizable number of Voicesspondence members share an interest or have any characteristic in common, the club helps them organize more closely. A rapidly growing and very active group of VS-ers is composed of those who record and collect railroad sounds. Almost without exception the railroads must have steam rather than diesel for motive power, and since steam engines are getting to be rare in this country the railroad hobbist will travel far to get a good steam sound.

The VS Tape Library contains several tapes of railroad sounds contributed by members, including one from VS-er Max Nicholls of South African railroad sounds.

We consider this idea of organizing a group within the club of members interested in some special recordings to be a fine idea for all tape clubs to follow.

District Director Bob Crouse of the Voicesspondence Club arranged a Tape-Vention for members in his district at his home town of Perryville, Maryland, last spring. The meeting was held at the American Legion Hall, and all who attended are still talking about the quantity and quality of the fabulous food served. About 40 were present, and the program consisted of several short talks plus brief interviews of each one present with the club secretary acting as MC. VS-er Paul Stillwell (D.C.) made a recording of the entire proceedings which is available to any member just by sending a 5 inch reel of 1 mil Mylar tape to the secretary with return postage. The tape is very enjoyable listening, you'll meet some fellow club members, and there's a good deal of unrehearsed comedy in the interviews. Many makes of recorders were on display after the program. Another Potomac District Tape-Vention is being planned for sometime this fall.

The Voicesspondence Club is considering dividing the United Kingdom into two districts (as far as club members and activities are concerned) since membership in that country has grown so large. One district would be comprised of Scotland, Northern Ireland, and possibly Wales, while the other would consist of England alone. Club members are requested to submit their thoughts along this line to the secretary.

The club's Special Deputy for the United Kingdom is Jimmie Sime of Scotland. Jimmie's term of office expires, however, on January 1, 1959, and since his personal circumstances will prevent him from standing for reelection, club members in the U.K. are urged to submit the names of nominees for this position. All nominees, however, must first have indicated in writing that they have agreed to being put forward for the office.

Once again the bonds of friendship which are engendered between Voicesspondence Club members has been demonstrated. Voicesspondents Lil and Jim Conover of Richmond Hill, N. Y. also belong to the Van Kouwenhoven-Conover Family Association, Inc., all of whose members are descendants of one of the original settlers of the Flatbush area of New York. Upon learning that the treasurer of the association was going to Europe, the Conovers mentioned this to fellow VSer Eduard (Ward) A van Hesse of Amsterdam, Holland. Ward very graciously immediately contacted treasurer Blake extending him an invitation to visit his family in Holland.

Ward also arranged several pleasant surprises for the treasurer. These included meeting a historian-geneologist whose grandmother was also a Van Kouwenhoven; a trip to a museum in Amersvort where the curator had arranged a special display of documents pertinent to the family; and an especially thrilling trip to the old farmhouse from which the Flatbush settler had come for the presentation of a plate on which the old house was pictured.

For treasurer Blake the trip was made unforgettable by the extreme hospitality and genuine kindness of everyone along the way—all made possible by the bond of tape exchange from one VS home to another across the Atlantic.



VS-er Eduard (Ward) A van Hesse of Amsterdam, Holland, shown with mike, arranged a pleasant stay in his country for a friend of fellow American voicesspondents.

Vic Torrey, Director of the Blind Services Committee of Tape-Respondents, International informs us of a European tape club formed exclusively of blind people, which has been operating for the past two years. Its name is International Round Tape Organization, and it has members throughout Europe and elsewhere. Anyone interested in referring blind tape recordists to this organization are urged to contact its founder and present director: Mr. Hessel Reek, Jacob van Offwegenlaan 45, Ruswuk (Z. H.), Holland.

Mr. Reek is an employed blind man who speaks English and is well acquainted with living conditions of the blind throughout the world. Several members of the club, and also Mrs. Reek speak fluent English.

American Tape Exchange member Andy Smith in Durban, South Africa, reports that they have started an organization for blind people called "Tape Aids for the Blind." People will read and record music for the blind. Since tape is so very expensive in South Africa, Andy would be most pleased to hear from fellow members who would be interested in donating some of their excess tape for this purpose.

Andy also reported that he had the pleasure of meeting two of his tape pals from England. He is most anxious to meet some of his pals from the states.

Roy Trumbull of Corte Madera, California, has been named assistant director of the Blind Services Committee of Tape-Respondents, International. Roy's appointment was by Vic Torrey, Oakland, Calif., director of the B-S-C for T-R-I.

Another honor came to Roy recently. He was first prize winner in the first annual TACKARD contest, sponsored by the T-R-I Tape Network. Roy, operator of Tape Station T6QRM, submitted a four-color TACKARD as his entry.

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TEEN TAPERS

BY JERRY HEISLER



IMAGINE that most of all you could have access to a movie camera, either in your own home or from a friend. If so, I have some suggestions that can and will provide you with loads of fun.

A group of college friends set out a while back to work up a movie, a *sound movie*. For one of our club affairs. We found out what tremendous fun we could have doing it plus the extra fun of watching it and seeing our friends react to it when it was finally presented.

First of all we made up a story, the content of which isn't important, since any story you choose can be worked up into a movie. We made an outline of how it would take place, what the various scenes would be, and what the dialogue would be. Once we had our "script" we made up a crew to handle the shooting, the acting, the sound and other details. Then we proceeded to go onto our school campus and shoot the scenes in the various locations. We even had a scene involving an automobile chase using real autos and taking place on real highways, and we even got involved with real police, (which wasn't in the script). When we finished our film and had it all developed and put to-

gether we began the sound track, which is where the recorder comes in.

We found that it would be very hard if not impossible to get lip synchronization, that is to have the sound occur as the actors lips were moving. So we decided to do the best we could and utilize a good deal of narration.

We set up the projector and then turned on the tape recorder and began playing a musical theme, fading out the music, adding the narration, changing the musical pitch, dubbing in sound effects, and rounding out our complete sound track.

Now this is not as easy as it might sound and our track was made over several times before we arrived at just what we wanted to have.

To do such a sound movie you will need to keep several facts in mind. First of all you cannot achieve lip synchronization since your tape and your movie projector are independent units with different motors and consequently different speeds. Variations will occur with each showing due to the variance of the electric current in your home.

You should at least start out on an equal basis by starting your recorder and

projector at the same time. Since your movie will no doubt start before the sound the thing to do is to pick the frame of the movie that you wish to start the sound at and then take a straight pin and put a hole in the frame so that it will appear as a white dot on the screen. When the dot appears start the sound.

Another thing to remember is the fact that most movie projectors have variable speeds, hence you can slow them down or speed them should the film and sound get too far out of line.

Also it is a good idea to have brief periods of no sound so that the film can catch up with the sound. If necessary stop your tape for a few moments.

Now then, if you bear these things in mind you should have little trouble. Careful recording and a proper beginning will take care of most of your problems.

Such an activity can let you make use of your full ingenuity with a recorder while your photographically inclined friends will have like opportunity with their cameras. You will have a chance to select the proper musical themes, sound effects, and to use your ability to mix and fade appropriately.

Remember the importance of building up things to a pitch and then fading them down according to the mood. Let us know if any of you come up with some fine results.

Our whole film cost only \$30 for film and tape and lasted about 20 minutes, but we had many fine fun filled hours in putting it on, and we still show it from time to time and we all enjoy it more with each showing. So much for the idea of the month.

In glancing through a recent issue of the Photographic Trade News, the bible of the camera stores, we ran across an article dealing with the importance of the teen market, and encouraging dealers to be prepared to handle it and to cater to it. It pointed up some contentions that I've made for a long time and that many of you are familiar with. Among things noted were the facts that teens have a lot of money to spend on cameras and recorders. More than 5 billion dollars pass through the hands of teens each year.

So this is just further evidence that the dealers who sell to you are aware that you are interested in purchasing equipment and they are ready and willing to help you in your hobbies. I think this is important for us as teens to know, since it was not too long ago that I can remember being ignored in most places I went because the dealer was "too busy for me." We've shown them that we deserve just as much attention as our parents and they are realizing it and are making big efforts to do the things that will please us and help us.

Mighty fine for us teen recordists and hobbyists to be treated with respect now a days.

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by James M. Laing, M. Ed.

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Hearing is one of your most precious human possessions. It, however, like every other precious possession, requires protective care. Without proper protection your hearing can leave you completely, and without warning.

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TAPE IN EDUCATION

BY JOHN J. GRADY, JR.



ENGLISH, naturally, always will be the chief foundational curricular subject in the schools of this country. In fact, it is absolutely necessary to have a knowledge of English in order to attain any degree of proficiency in all the other subjects taught in the American educational system. And it's simple logic to assume that the broader the knowledge of English and its components, the greater is the possibility of increased proficiency in other subjects. So, in every school throughout the nation, a veritable army of instructors are teaching English to millions of students—helping them to become more proficient as thinkers, as readers, as speakers, and as writers. And every semester, more and more of these teachers of English are adopting magnetic tape recording to aid them in doing an important classroom job more efficiently, thereby benefiting both their students and themselves. Also, they are winning credit for their schools because of the adoption of modern magnetic audio instruction.

Each year, more schools are progressing in the utilization of tape recording as a classroom function. Where, formerly, magnetic audio was accepted as a supplementary aid, it is now firmly integrated into instruction routine. The realization is expanding among teachers—from kindergarten to university—that a tape recorder is truly an instructor's tool and that their efficient use of it increases their competence. Tiring repetitive detail is being minimized, which lessens the mental and vocal burden during the periods of instruction, and permits teachers to extend personal attention to students in need of it. However, the happiest result of the adventures of ambitious experimenting teachers with magnetic recording is an inspiring one. It gives to these inventive educators a form of recognition that is more encouraging than rewards and applause, or even the posies that TAPE IN EDUCATION has been pitching at them for three years. Now, educational institutions devoted to the training of teachers are providing course work and laboratory practice. The purpose is to equip entrants into the teaching profession with adequate skill to utilize for themselves and their pupils the expanding benefits being developed through educational magnetic recording.

The proven success of language laboratories using magnetic tapes is an impressive indication. They stand out as the finest examples of carefully planned audio instruction. But in music departments, in shorthand instruction, in speech and drama, in radio and television, and in other audio related subjects, an approach is being made to similar systematic procedures. Ultimately, complete orderly tape routines will be available for numerous subjects. And in English, that very important foundational subject—a natural for magnetic

audio—there is promise of tape treatments, which will help to better equip students to meet the requirements of a business world where proficiency in communication will be of paramount importance.

Credit for being a pioneer in the adaptation of magnetic recording to the teaching of English is due to Ruth Y. Terry, on the faculty of Muskegon Senior High School, Muskegon, Michigan. Miss Terry not only rates as an inventive educator, because of her numerous applications of tape recording to teaching, but qualifies also as an enthusiastic active proponent of educational magnetic taping. As author of a brochure, TAPE RECORDING IN THE ENGLISH CLASS, Miss Terry passed on to other teachers the results of her magnetic audio experiments. It is a valuable guide and will conserve the time of English teachers, who, ultimately will adopt the tape recorder as a teaching tool. The brochure is published by the Michigan Audio-Visual Association, as a service supplement to its members. It is available for twenty-five cents from the University of Michigan Audio-Visual Center, 4028 Administration Building, Ann Arbor, Michigan.

From actual classroom experience, Miss Terry details four of her experiments, which she developed into established routine. Her treatment of Recorded Formal Speech prompts the conclusion that members of the class must have been inspired to perfect their deliveries through their own self analysis, aided by the constructive suggestions of their teacher. The instantaneous playback of each student's vocal effort provided conviction that audio applied to English made the subject more interesting.

The second experiment, Panel Discussion, makes an interesting session for any student group. The participating panel, and the rest of the class in on the audition, really have something tangible to help them. That tape of the discussion when played back—repeatedly, if necessary—provides excellent material for thorough evaluation of the effort. The third experiment, Radio and Television Programs, provides the class with a selection of trapped off-the-air programs for review and analysis. Such class work prompts students to think, and then to speak their thoughts in an interesting way. The fourth experiment, Interviews, is used by Miss Terry to emphasize the value of courteous discussion, and especially, courteous listening. The tape of the interview provides the sole proof of the exhibition of that rare quality—courtesy in discussion.

TAPE IN EDUCATION thanks Miss Terry for the opportunity of using her brochure to illustrate, in a limited way, that Tape Recording In The English Class can make a curricular subject a very interesting and beneficial experience.

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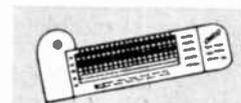


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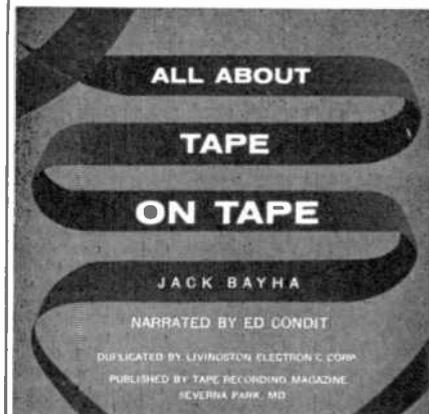
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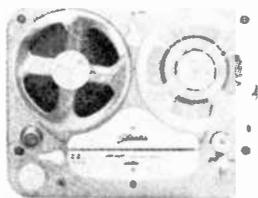


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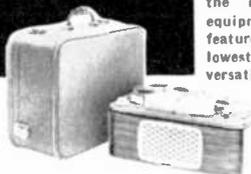
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TAPES TO THE EDITOR

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If you do not own a recorder, a letter will be acceptable. Address tapes or letters to: The Editor, Hi-Fi TAPE RECORDING, Severna Park, Md.

To the Editor:

Here's an open letter to all audiophiles and particularly to the attention of Mr. Dahlberg in Kenosha who utilized the column in the October '58 issue to state his feelings.

This reply to Mr. Dahlberg is not offered with any thought of trying to make his position look ridiculous. I have been through exactly what he is faced with now and it's too close to home for any antics on my part. After going over his letter very carefully I am convinced he is sincere and honest in his fears. It is my intention to try and clear up for him some of the difficulty he is having and I hope he will accept it in that spirit.

Frankly, I feel Mr. Dahlberg very definitely *is* being duped, but not for the reasons he might think. He also has lots of company. Nearly all his trouble is caused by accepting very misleading and incorrect information AS IF IT WERE FACT when in reality it is no such thing.

This won't be difficult to establish. What has really happened here is that Mr. Dahlberg has fallen victim to a routine as old as civilization itself . . . namely, the quaint old system of double-talk given to the uninitiated by someone who glories in keeping things in a state of constant uproar.

From the way Mr. Dahlberg has constructed his logic as outlined in his letter it becomes quite plain he is intelligent and has the ability to express himself well. It is just unfortunate that this logic is constructed on a false premise as I will attempt to point out. Because he covered so many misleading impressions in one letter it would require many times the space his letter occupied to do justice to all of them but the invitation for him to contact me directly for a sufficient amount of detail to properly clear up the dim points is gladly extended.

Now let's have at it:

To my mind it is incomprehensible how Mr. Dahlberg could base the essence of his thinking on the statements of a sound engineer whom he clearly describes as having refused to have anything to do with a four-track system. It doesn't take much imagination to realize that from this point he goes from confusion to chaos. Under what conditions could Mr. Dahlberg possibly have faith in the statements of any individual who plainly told him he refused to have anything to do with such a system? If he had not investigated it thoroughly then he certainly would know nothing about it and any remarks he might make on four-track equipments would be highly suspect if for no other reason than his ignorance of it.

The "technical response" of this engineer is downright stupid. What Mr. Dahlberg has really been given here, and *this* is the

pivotal point in the whole matter, is a lot of THEORY which has very little relationship to what REALLY HAPPENS in actual practice.

He has taken these lofty statements given him as the epitome of truth and from there he is bound to wind up confused and disappointed. The FACTS are what count . . . not the theory.

Mr. Dahlberg asks that he be proven wrong. It is simple to do this. It cannot be done in a single letter however. What can be done here is to clear away a lot of the general misunderstanding in his mind . . . first.

The "new" quarter-track system he is so upset about is not very new at all. The writer has had this quarter track head under exhaustive testing for over three months and if, as Mr. Dahlberg writes, he has been enjoying his stereo tape setup for "several months now" it is difficult to see why he hasn't heard of it.

This quarter-track system has been subject to a lot of misunderstanding and this is largely due to people such as the sound engineer Mr. Dahlberg talked with . . . people who know nothing of the system, haven't seen it, haven't tried it, don't know one blessed thing about it excepting what they glean from theory books but who aren't the least bit above handing out to people like Mr. Dahlberg the "facts" as if they were literally true when in reality there is no sensible basis for the statements they make.

From the way his letter is written, I glean the impression that Mr. Dahlberg thinks this quarter-track system is a method whereby one plays back four separate tracks at the same time. This is *not true*. Many, many people are under this false impression. The method is exactly the same as the one he is using at the present time excepting that the quarter-track head is compatible with currently available tapes and will double the playing time of any recordings made for use with it . . . regardless of whether the recordings are commercial or made at home. The actual operation is very similar to the monaural tapes used in thousands of homes today. The quarter track head records only two tracks at any time. It has only two tracks . . . just like his present stereo in-line head does. The tape is recorded in the same way. When the end of the reel is reached you just turn it over the same as you do a monaural tape and record it again on the other side. This gives you a tape with 4 tracks . . . two stereo tracks in EACH DIRECTION. Only two tracks are played at any one time if stereo is desired. You can also put four separate monaural tracks on a tape by using only one of the tracks in the quarter-track head at any given time.

Nothing Mr. Dahlberg currently owns is either obsolete or useless. He is certainly NOT required to do anything more than mount a quarter track head on his current equipment, make the necessary adjustments for this head and take up just where he left off . . . except that he will get better frequency response, twice as much playing time and a lot more pleasure for his trouble.

All this folderol he has been handed about the lousy signal-to-noise ratio is just so much nonsense. It is quite true that the output of a quarter track head is not as great as a half track head of the *newer* type but it has just as much output as the older type half-track in-line heads has and when his engineer friend advises him the difference is so vast as to constitute almost a crime then he has gone off the deep end.

In his entire letter there is only one point at which Mr. Dahlberg and I can partially meet and that has to do with the speed at which the new quarter-track tapes are to be played. Our agreement in this matter is for different reasons however.

I am against the issuance of quarter-track tapes at a speed of 3.75 ips for the reason that the vast majority of tape transports now in operation are simply incapable of giving proper speed regulation at this slow rate. Don't get this wrong. In a deck properly designed to operate well at 3.75 ips and with a quarter-track in-line head mounted thereon I will be very happy to put it side by side with Mr. Dahlberg's equipment and the acid test of any high fidelity sound . . . his own ears . . . will convince him beyond doubt that this system will outperform whatever he has at 7.5 ips with his half-track stereo heads.

All the new decks in production at the present time from *progressive* manufacturers have been given very careful consideration on the designing boards to assure excellent results at 3.75 ips and you can take it from me . . . those results are terrific!

The problem here is the old game of requiring people to get rid of their present tape mechanisms and buying one which will operate well at the slow speed. Some tape transports we have tested (brand new ones too) have so much wow, flutter and weaving of the tape from side to side over the head that they give downright inferior reproduction at 7.5 ips. To even consider such equipment for use at 3.75 would be cause for hysterical laughter were it not so very unfunny to the large numbers of people who have been sold this junk. The only thing we can hope for is that next time they will think more and react less.

The entire staff of T.R. is no doubt quite familiar with the grief already caused by the makers of the "home" type tape recorder with respect to equalization. Ads are being run advising you to slap an in-line head (of either the half or quarter-track variety) on your present tape recorder and you're all set for stereo. It is blithely suggested your table model radio or tv set be used for the second channel. Well, considering that the equalization in most home type tape recorders is so far from the NARTB standard anyhow, it certainly won't be inconsistent to follow this procedure. It will give you putrid sound from *both* channels and this will be the biggest boost the stereo disc could possibly receive. In these

cases the speed used is immaterial. Take your choice.

Mr. Dahlberg feels the cost of tapes is due to the high expense of procuring talent, setups, etc. This is incorrect. ALL the major disc labels have recorded their material on stereo tape for several years and they blend these stereo tapes through a mixer to procure the unspeakable monaural LP discs you buy now. They were smart enough as far back as '55 to know it was merely a question of time until the stereo disc would be a reality and their catalogues will be jammed with stereo recordings because they were recorded in stereo to begin with. No . . . the high cost of tapes is not due to the expense of actually RECORDING them . . . it is due to the inefficient and awkward methods employed in DUPLICATING the tapes you actually buy. A disc can be stamped in very short order with modern equipment.

A tape must be run through a duplicator from beginning to end and only a certain number of tapes can be made at one time. *This* is the draw-back in the cost of tapes.

With the adoption of the quarter-track system at 7.5 ips the tape industry could put twice as much material on their tape in the same time, thereby cutting costs of tape stock AND copying time in half. At a speed of 7.5 ips the quarter-track in-line heads will give superior results to the presently used half-track heads. This has been proven to my satisfaction by over three months of thorough testing.

A sensible and logical pricing arrangement on tape for competition with the stereo disc would be to sell recorded tapes at the same cost as a stereo disc . . . plus the cost of the stock. If the quarter-track system at 7.5 ips, plus much closer attention to improving duplicating methods, is given some close attention, it is entirely possible to achieve such an arrangement. Don't overlook the fact that there is no sensible reason WHY a stereo tape should cost no more than a stereo disc. You get better quality of reproduction for one thing. You should expect to pay somewhat more for this quality but I certainly agree that the present spread between the two mediums is excessive and discouraging. Another benefit of tape is this: If you ruin a stereo disc it goes in the ashcan. If a stereo tape recording is spoiled you still have the tape for re-use over and over again.

I will close by giving Mr. Dahlberg and all other interested audiophiles some items to mull over:

1. The half-track in-line head is on the way out. It HAS to go out except for very limited applications because it utterly prohibits an effective competition with the stereo disc.

2. While all of you are reading this, some joker is working on the "new" eighth-track system which will come roaring down on us in a few years . . . with a repetition of all the current misunderstanding, controversy and hurt feelings.

3. Try to remember that if it had not been for these improvements which are continually being made, every single one of us would still be listening to cylinder records through courtesy of Mr. Edison's morning glory horn. — Frank Zeman, 2688 Stratford, Cincinnati 20, Ohio.



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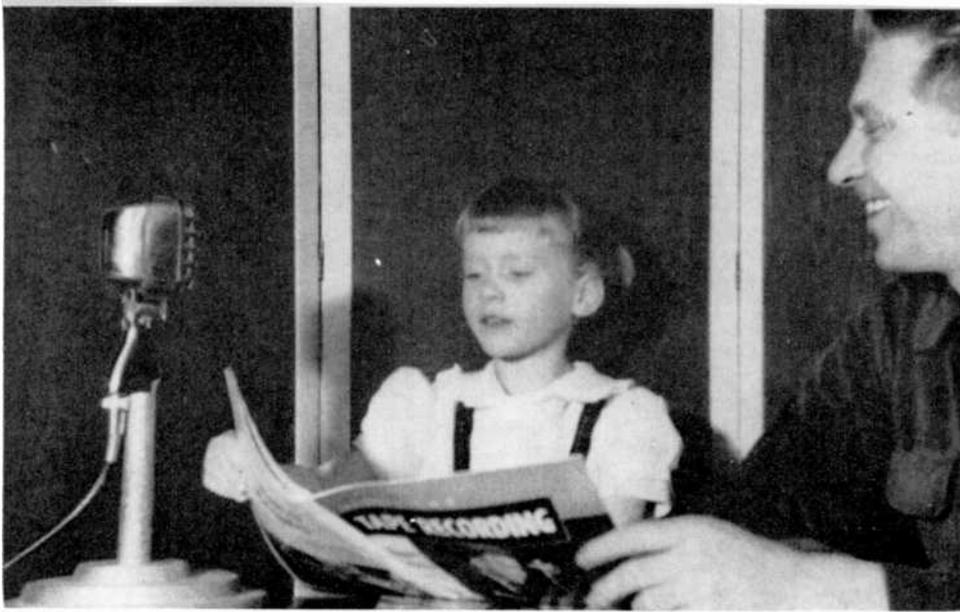
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WYOU Presents

by Bob Coucill

Program Director, WWBZ

. . . . your home recordings can be improved by following the practices used for radio programming.

LET'S look at it this way . . . Every home tape recorder is basically a privately owned radio broadcast station. Its product is organized sound, just like that of any commercial broadcast studio; and it is bound to time limitations (length and speed of tape) just like any professionally produced broadcast. When you turn on your radio, you may be turning on a tape recorded program or part thereof.

The question I am posing here is: how many of the tapes YOU have made can qualify for the name "Program"? . . . in the conventional sense in which radio has taught us the meaning of the word.

For the recorder to fulfill its purpose, there must first be a subject to present, someone to produce it, and someone to listen to it. Tape recording has these things in common with radio. Even if you tape only a personal message to your Mom or your girl, or a business letter to your private secretary, the chances are that you unconsciously use one or more of the fundamental principles of broadcasting. This, then, is meant to be an argument for the conscious and deliberate use of production practices which make for more universal enjoyment of your product: the tape recorded program. Let us examine some of these and see how easily they can be made to improve even the simplest of sound presentations.

Special care should be given to the selection of just the right opening sounds for your tape. Here the mood is set, the expectancy element is at hand, and whether or not your listener is swept into attention depends largely upon what you choose to have him hear first. Use your imagination and strive for a sound that shall be as pleasing as possible. Try to find ways to enhance your subject; fill it in, round it out, showcase it. Take care to avoid exaggeration but don't be afraid of novelty. Above all, be consistent. Once you have established a format, you are obligated by the principles of good broadcasting to follow through to the end of your presentation.

One of the most important elements of good programming is what actors and radio people call *pace*. This should not be confused with another theatrical word: *rate*. The term rate refers to the rate or speed of delivery. Pace refers to its rhythm. Good pacing is not so difficult to achieve as most amateurs make it seem. Try the following formula on your own equipment and you will discover how easy it is to pace yourself to better tapes. From the moment your program begins until it closes there should be no—repeat NO—inadvertent pause. In this regard the medium of tape has it all over radio for, like the movies, it can be stopped and started and spliced; whereas radio, like the stage, goes relentlessly on and LIVE!

Please note that I have said there should be no *inadvertent* pause! Every actor alive or dead has used the dramatic pause for telling effect. And so can you. Just be certain that when a pause occurs, it has meaning. A good pace is achieved by the elimination of meaningless pauses. This means, then, that the rate or speed of a speaker is less important to good pacing than that there be no pause between one speech and the next; or between the introduction of a song and the start of the music.

A slow pace will result from the reverse use of the same principle. Slow pacing, usually, is used only as part of the effective presentation of drama or for reading in what is called a low key. You can use it also to vary your delivery for the purpose of accent. As a general rule, however, once your program has started, Bang! that's it. Keep it moving.

Variety or color can be introduced into the presentation of almost any subject with just a little extra time and thought. The result of this so-called extra effort will astound you when you hear your tape for about the fourth time. Instead of the sorrowful boredom which most amateur tapes induce, even in the mind of the person who

makes them, you will find that your additional work has paid off with a nice crisp professional sounding production. Presto! Your stature will have grown immeasurably in the eyes and ears of your audience.

Another extremely useful device for insuring presentation quality is *contrast*. (In this connection we have already mentioned varying the pace.) To further illustrate contrast let me give you an earful of the following sequence of sounds. The recorder has just been turned on. What do we hear? There is the sudden striking of a Chinese Gong whose reverberations linger and finally blend with the tinkle of a music box tune. This lasts until the gong has died away and is superseded by the singing voice of a small child, too young to pronounce the words. The child's tune ends and (without pause) the music box re-enters to take up the slack until her father's voice comes blending in with a gentle, "Thank you. Carol. That was very nice." The child murmurs a demure, "You wel'tum." And when the music box fades out, we are set up for whatever the recordist has to offer in subsequence.

The preceding scene was used by the author to introduce, on tape, the members of his family. It took four sounds to produce: gong, music box, child's voice, and that of the father. Of these, only the music box was repeated. These four sounds fall readily into the category of *contrast*. The manner in which they overlap or blend is a matter of *pace*; and because they are such good attention getters the next technical device to use would be the logical dramatic *pause*. This serves to heighten the interest already generated.

I think one of the simplest and best tricks a home recordist can use is that of alternating voices. When making your plan of presentation see if the subject matter doesn't indicate alternation between male and female voice ranges. Then get your wife or your husband, or even the children, to "Spell" you by taking turns as announcer or commentator or guest speaker. Be fair and give your accomplice everything he needs for comfort in his part. Keep those gaps closed (even if it means splicing out just two seconds of silence) and be liberal with detail. Remember that if a thing is worth presenting it is worth presenting fully.

The last and biggest of all production methods to be reviewed here is the organization of your material. You may want to write a script or scenario for programming a tape of any length. But even a casual short recording gains in interest when its parts are planned and presented in logical sequence. Quite often an old tape which is uninteresting in its entirety contains spots of unique color or even spectacular effect. These can be "lifted" out of context and spliced into a new project with gratifying result. They may give color, contrast, or detail; while their removal from the old tape serves not only to preserve them permanently, but also frees you of any obligation to keep an unlistenable tape merely for a few seconds of valuable sound.

Radio Station WYOU is yours to manage as best you can. The calibre of your "broadcasts" is in your hands. Tape knows no limit. You are the owner-producer, the editor, the production staff and star performer. You have an obligation to your audience and yourself to be as interesting as possible. Let us hope the ideas so sketchily presented here will find their complete development in your studio and that you will produce tapes which show how proud you are of your hobby and how clever you and the rest of your family can be in preparing them. Good taping to you.

CONTINUITY	from:	STATION WYOU
TITLE:	COUCILLS IN THE AIR	
PRODUCTION NOTE: THE AUTHOR PROCEEDED WITH THE MATERIAL WHICH HE HAD AT HAND AND THROUGH WHICH HIS FAMILY COULD BE MOST READILY REPRESENTED. OTHERS WILL FIND THEIR OWN WAY OF PRESENTATION USING SUCH MATERIAL AS MAY BE FOUND INDIVIDUAL WITH THEM.		
* * * * *		
SOUND:	CHINESE GONG (Cross-fade into:	
MUSIC:	MUSIC BOX (Cross-fade into:	
DAUGHTER:	Sings song. (20 sec.)	
MUSIC:	MUSIC BOX (Sneak under and up to end.)	
MAN:	Introduces program: who you heard and what you will hear. Presents Wife.	
WIFE:	Speaks of Civic activities such as:	
DUBBING:	(Excerpt from broadcast of Book Festival.)	
WIFE:	Introduces Man telling children's yarn.	
MUSIC:	BRIDGE (Light, Gay)	
MAN:	Illustrative excerpt from story written by Wife.	
MUSIC:	BRIDGE (Light ender)	
MAN:	Tells of Wife's background in Child Education. Gives statistics of schooling, career, present hobbies. Introduces Wife's song.	
WIFE:	Sings original song. Introduces Man in role of Mark Anthony.	
MUSIC:	BRIDGE (Dramatic Theme)	
DUBBING:	Excerpt of Man's performance.	
WIFE:	(On cross-fade) Presents elder Son in radio play.	
MUSIC:	(Up 10 sec., then fade out for:	
DUBBING:	Son in closing scene of play.	
MUSIC:	(Up to end.)	
MAN:	Introduces younger Son.	
SON:	Recites school poem.	
WIFE:	Introduces interview between Man and former employer.	
MUSIC:	Up and out. (Pop tune from year of interview.)	
DUBBING:	Employer speaks of Man's working habits.	
MUSIC:	Up to end.	
WIFE:	Gives resume and estimate of Man as Husband and Father.	
MAN:	Reciprocal estimate of Wife's attributes. Introduces candid scene which shall include Grandfather.	
MUSIC:	BRIDGE (Up 20 sec. and under for:	
FAMILY:	Dinner table scene.	
MUSIC:	Up to end.	
MAN:	Speaks of early recording methods and compares with today's.	
MAN.....	Share spoken farewell.	
WIFE		
MUSIC:	Up to close.	



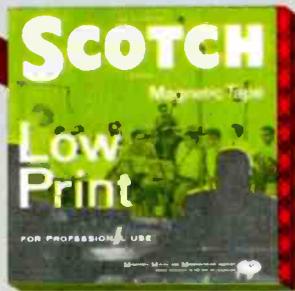
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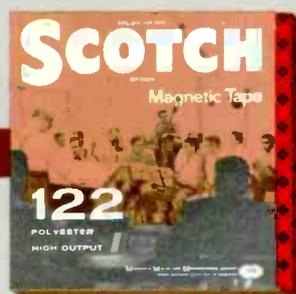
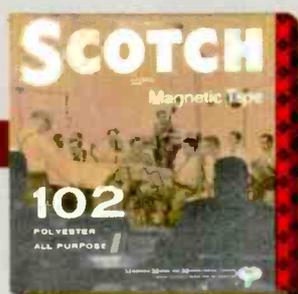
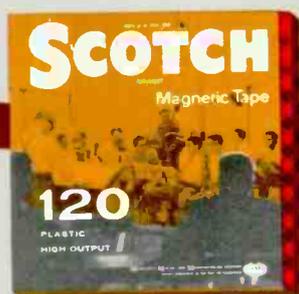


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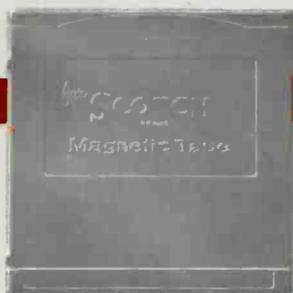
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Right dress . . . and ready for their number at a benefit performance. The matching tartan ties and sleek suits of these barbershoppers are quite a surprise to those who expect mustachioed foursomes in this line of song. Popular songs, too, are sung in harmony.



TAPE



“THE Old Songs, the Old Songs, the Dear old songs for I Love to hear those dear Old Songs, that bring Close Harmony”! Now barbershop Quartets are using tape to help sound that chord in unison, and as a means of comparing tuneful notes among chapters many miles distant, learning new arrangements, recording melodious tape archives.

Tape recorders are also helping develop and foster new quartets, introduce many to the very real pleasure that can be found when voices are raised in song. Great fun in the parlor a few decades ago, it's widely promoted and enjoyed by devotees even in this day, as anyone who's encouraged a singfest for tape recording has discovered.

Next time you harmonize, these pointers from some of the regulars will help your recording off to a tuneful start. Four part harmony, Barbershopping that is, is as much for the women as for men, except of course that the bass clef is voiced an octave higher by the girls. The women's society is known as the Sweet Adelines, in some cases wives who've followed this line of amateur singing in self defense.

Before test taping your own quartet, it's important and

a matter of pride to know just what this formidable set of initials stands for. The S.P.E.B.S.Q.S.A., The Society for the Preservation and Encouragement of Barbershop Quartet Singing in America was begun way back in 1935 by a small but congenial group who like to sing in harmony. At the first singfest there were twenty-six present and tunefully accounted for, at successive meetings the membership tripled and quadrupled. Today enthusiastic chapters of Barbershop quartets range throughout the United States, Canada, Alaska, Hawaii and the Canal Zone. The one thing unaffected by extremes of temperature, four part harmony fits the same distinctive pattern from icy igloo to tropical grass shack in Kalakalehi.

The unofficial auxiliary of the S.P.E.B.S.Q.S.A., the Sweet Adelines are every bit as polished as inveterate male quartets, delightful to hear. Though, completely amateur, quartets through practice and the guidance of tape recording can attain a high degree of professionalism, however that's secondary to the fundamental purpose of sharing the pleasure to be found in song. A special kind of song.

In those days when stacked and staggered heads meant



CLOSE HARMONY

by Sheldon O'Connell

. . . . *barbershoppers are discovering the usefulness of tape recording in their hobby.*

quite another thing, when wind-up Victrolas and cylinder recordings were the vogue, a lot of vigorous songs were making the rounds. Some were comic, "Where Did You Get that Hat," "Down in Jungle Town," others set out to put an object lesson to music, melodramatic tales with built-in homilies, patience triumphant over adversity, other themes designed for moral uplift and edification. A great favorite with some quartets "Father dear Father Come Home with me Now," "Still the Villain Pursued Her," "More to Be Pitied Than Censured," "Bird in a Gilded Cage," these and others like them managed to capture the very spirit of a colorful era.

Many of these old songs, "Shade of the Old Apple Tree,"

"After the Ball," lend themselves especially well to singfests for tape recording, since the words and the melodies are familiar to just about everyone. Song times can be improved by taping those barbershop chords whenever possible, taking the audio measure of your quartet so that the voices sound their "A" in proper relation to themselves and the microphone. There is usually some compensation to be made when voices are more dominant than others, a fairly common occurrence. Comparative loudness of voices is reflected at once by the microphone, quick to capture any imbalance during the rendering of a song or solo passage.

A voice shrill or high pitched will record to greater advantage if placed slightly off mike, the other voices remain



George Little directs the Bach choir which is placed in a semi-circle, its singers grouped in an arc as close as possible. The distance between the microphone and the first row of singers is between three and ten feet. Tape testing will indicate proper placement, since it depends in large part on the nature of the selection to be recorded, and characteristics of lead voices.



Tape recorder at waist level keeps all controls within easy reach. Minimizes risk of going off mike while making adjustments. Songs can be memorized more easily if studied a phrase at a time. Lead voice sings a phrase, repeats it in duet, then it is sung by trio and finally full quartet.

on mike but step back just a little from the microphone, this will cut down on the shrillness, while giving the combined voices equal prominence on the recording. The high-frequency content of the voices diminishes in relation to the amount of angle "off mike," the greater this angle the less stridency. Knowledge of this characteristic proves useful in quartet placement. Conversely, voices which do not record well in a deliberate off mike setting, are those with prominent low frequency characteristics. Results can sound muddy or woolly. Another consideration is the directivity pattern of the microphone, in highly critical work or an impromptu recording, its angles of pickup influence the performance.

The general purpose microphone furnished with most tape recorders turns in a remarkably fine performance when used skillfully. Instead of turning the machine on and letting it eavesdrop on your quartet while it roughs out the harmony angles of who's to sing when, results are naturally better if after dry trials to arrive at a loosely knit framework of real harmony, you then test tape. Somehow it comes to mean more when the quartet has put in time, mellowing a number, custom tailoring it, to then run off a few tests on tape, enjoy a playback, listen for the voices that are anticipating, those split second head starts that have to be worked out. It's surprising what taping and practice can do. The regular Bar-

bershoppers have a great idea for introducing the various chapters to new arrangements of popular and standard numbers. A few quartets in say, Kenosha, Wisconsin, put some of their most recent best efforts on tape and send it to another chapter in another city, there the members enjoy a playback, discuss styling and interpretation, work out a few of their specialties and forward the tape to the next chapter, in a kind of chain harmony.

Once a volume setting is arrived at in the placement of your quartet it shouldn't require much adjustment during the rendition. Dial spinning or "riding the gain" in an attempt to compensate for drop outs or overloads shouldn't be necessary, this can often cancel out the natural tone setting and give a wavy effect instead of the building and diminishing of sound called for within the harmonic structure. Your quartet, whether it sings pop songs in Platter harmony or the old ivy variety that cling will still require someone to keep a check on the recording meter. Since most amateur performers are absorbed enough in the act of recording itself, it falls the responsibility of the recordist to listen for those times when a slight adjustment in level, perhaps during softer passages, will improve the take.

The recording of a group singsong, that is more than the specially balanced quartet has slight variations in the



Earphones are useful during preliminary test, and when making a set-up for a trial balance. A listen to tape recordings traded among chapters, often suggest novel arrangements for old standards.

microphone placement and volume setting, it is usually a less critical recording.

When recording a sing song, the microphone may be placed at a greater distance from the group, this practice shades the prominent voices, while mellowing the general pick-up. A little more care in the placement of voices will result in a superior recording, but it does take that much more time to prepare. There's an easy way to remember proper placement of voices, it will help those taking part, find their places quickly and easily. The women are in the front, the male voices at the back, then the high voices of each group on one side, low voices on the other. Should you discover a changeling in your midst, an adolescent that vacillates between a croak and a trill, better nominate him to turn the music.

Sighting from the microphone which faces centre of the entire group, sopranos and tenors on one side, altos and bass voices on the other. The nature of a selection to be recorded, size and power of the chorus of voices determine the distance between singers and microphone, varying from perhaps four to several feet.

If yours is a shining new microphone, and you'd like to do a Fred Waring complete with full chorus, there are further adjustments that can be made within the basic framework. The bass voices can be adjusted further, placing the stronger voices toward the outer line, soft voices near the centre, this draws them closer to the direct line of the microphone. These compensations may then be made with each voice group.

The optimum set-up made, placements arrived at through careful adjustments, you can listen to the over-all balance through phones; if at this point you discover a reel of tape hadn't been brought along, prepare to face that exquisite moment of truth, he travels fastest, who travels alone. Last one out the door and down the street after you is Sal Mineo's barber! Back to the barber chair for tape news from the societies who sponsor and encourage this kind of activity. They recommend the use of alternate tape recorders, so that no one member will be called upon to supply the machine week after week, since many of the members do have tape recorders this is no problem. In larger areas a chapter of songsters will finance the purchase of a machine exclusively for member use, and the relaying of taped harmony and newsletters from one chapter to another.

Song sheets, program scores, arrangements, words and music are made available to members from the headquarters of each organization. In those areas where no chapter of "Spebs" exist, a nearby or sponsoring chapter will pitch in and help those interested form one. Kits are provided



Harmony by members of the Sweet Adelines follows the authentic pattern established by the male barbershoppers. Though they are non-professional, trios and quartets are often sought after by charitable and civic groups.

that include material for the guidance of quartet and group sing songs, rules of procedure, music sheets, forms, approved and easy to follow arrangements and other helpful and encouraging material.

The S.P.E.B.S.Q.S.A. keeps all enthusiasts informed of the activities and doings of other song chapters all over the country, sharing the same general aim. The teaching and training of members to sing barbershop Harmony style, without benefit of instrumental accompaniment; to organize and promote the forming of choruses and quartets, and generally to enjoy the pleasure to be found in song!

CONTEST WINNERS

Here they are, the lucky contestants whose entries were chosen by our judges as the three best in our "You Be The Editor" contest.

First prize goes to **Walter O. Voegelé**, 340 West 57 Street, New York 19, N. Y. Congratulations Mr. Voegelé, your 30 reels of recording tape are on their way to you.

Second prize has been awarded to one of our overseas subscribers, **Eduard A. van Heese**, of Weteringschans 243, Amsterdam, Holland. We are happy to ship your 18 reels of tape Eduard.

Lastly, third prize was sent to **Louis P. Boeri**, 1208 Woodbourne Avenue, Baltimore 12, Maryland. Congratulations also to you Mr. Boeri.

We are sure the winners will have many enjoyable recording hours with their prizes.

Judging was not an easy task due to the many, many entries to review. Our thanks to all who entered for their interest and enthusiasm. Perhaps your name may appear as a winner in some future contest.

Make Your Own Windscreen

by H. J. Hasbrouck

... Voice recordings can be improved with simple windscreen.

It was a popular superstition in the days of wooden ships and iron men that a becalmed sailor, if sufficiently inspired, could "talk up a breeze." Today about the only reliable way to talk up a breeze is to work too closely to your microphone while recording. Microphones don't like wind. At close range there is a component in your speech that is just plain air flow. It is the air that was expelled by your lungs for the purpose of vibrating your vocal cords. After it has performed the function of initiating sound vibrations in your throat this air should do nothing further except join the rest of the air in the room. It should never reach your microphone.

A microphone that is blown into will retaliate with a surprising assortment of wheezes, thumps, pops and fuzz. These superfluous sounds which are not part of your normal speech, tremendously degrade the quality of your recorded voice and often affect its intelligibility. Some believe that under these conditions they are overloading the microphone but this is not necessarily so.

The usual remedy is to back away from the microphone. Some microphones are worse offenders than others but most of them require a working distance of from eight to twelve inches if there is to be no mouthiness or thumping. The remedy however brings other trouble. If the working distance is increased the reduction in microphone output requires an increase in recording gain. This means that the ambient noise level in the room effectively rises. Now you may hear upon playback, not only your voice but the whir of your tape recorder, the reels creaking, mom rattling pots and pans, and maybe the neighbor's dog barking in the next yard. The unwanted sounds may be interesting and good for a laugh the first few times but then the recordings take on an unprofessional quality. The performance becomes amateurish.

Motion picture and sound recording companies spend thousands of dollars to sound proof their studios against unwanted sounds. But what can the home recording hobbyist do, on his limited budget, to subdue this competing noise level? He can make his own windscreen and then talk close to the microphone.

If you have an average quality crystal microphone the windscreen may move you up into the hundred dollar class. Most present day microphones have an overabundance of high frequency response tending to compensate and offset any tendency toward boominess at close speaking range. Except for the wind effects described they are capable of very excellent voice quality on "close mix." Your microphone may even contain a windscreen, if you paid quite a lot for it. Then you do not have a problem. The windscreen about to be described is for those not so fortunate.

Here is a simple experiment that reveals the presence of a wind component in your speech. Talk to the back of your hand at close range, about one quarter of an inch away. Pronounce all of the letters of the alphabet and you will

discover that some of them begin with explosive releases of air such as the letters P, B, D, T, etc. These will produce thumps in a voice recording. Others have prolonged hissing sounds at the end, such as the letter F, another form of wind component.

The reader with some technical background will recognize here a similarity between the voice vibrations and an alternating electric current. The wind component of the speech is the direct current part of the electric signal. What is needed is a filter that will pass only the AC portion and that is what the filter or windscreen on your microphone is going to do.

Again try the test on the back of your hand, which is quite sensitive to wind. Try blowing softly through a handkerchief. It moves a little but the wind does not go through. Sound waves however experience no difficulty in passing through. Actually a sound wave does not go through a membrane but moves it rapidly in both directions disturbing the air on the other side. Thus the wave continues to be propagated. Membranes that are too heavy may affect the frequency characteristic of the sound, therefore we are going to use a very light mesh in our windscreen, such as a nylon stocking material. There is always plenty of this around but don't use the part with the run.

Various other materials can be used. The windscreen attachment to one popular make of crystal microphone, shown in the illustration, uses fine brass wire screen such as is employed for gasoline strainers. This may be found in an auto supply store and is more durable than thin cloth. However the nylon is all right. If the stocking was very sheer two layers may be needed. Strangely enough the fine holes in the texture do not allow wind to pass in any objectionable quantities.

Windscreens used professionally out of doors for news-reel work and the like, completely wrap the microphone. However our wind has a definite source and direction so that it is necessary only to place the screen between the source of wind, the mouth, and the microphone diaphragm.

In your home made microphone windscreen the feature of being removable serves no practical purpose since the system will work just about as well on remote pickup with the screen attached. However if the screen can be removed at will it will provide a most dramatic demonstration of its effectiveness. The following jingle is a good one to test with:

Peter Piper picked a peck of pickled peppers.

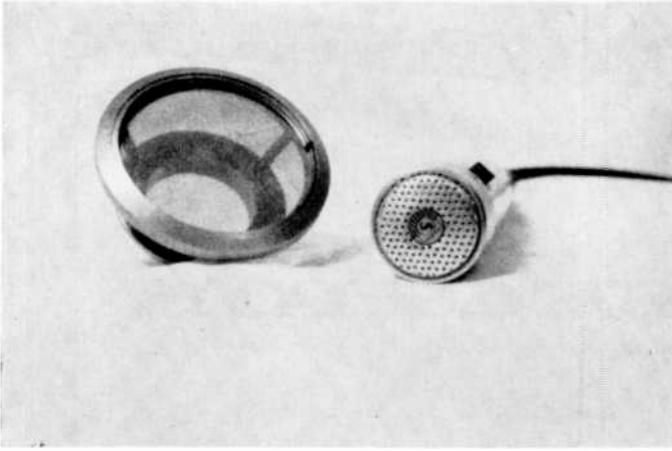
A peck of pickled peppers Peter Piper picked.

If Peter Piper picked a peck of pickled peppers

Where is that peck of pickled peppers Peter Piper picked?

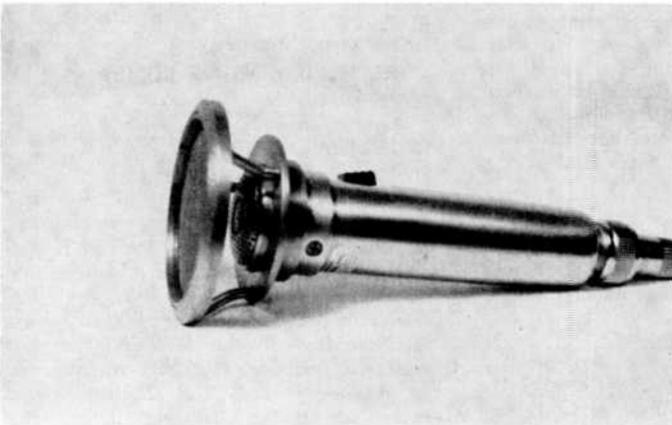
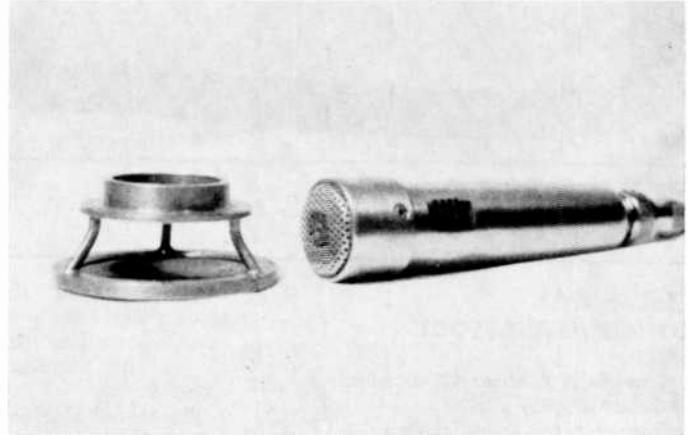
If your microphone will handle that at two inches away without a mess of thumps you don't need a windscreen. I have yet to see one that will. Even a two hundred dollar ribbon mike chickened out in this check.

As for the actual construction of the screen all that is



Your windscreen needs a filter which will allow sound waves to pass through, or vibrate it, but will keep out unwanted wind noises. A very light mesh, such as nylon stocking material should be used for this since heavy textures may affect the frequency characteristic of the sound. The windscreen attachment shown here uses a fine brass wire screen. This can be obtained in an auto supply store and is more durable than the cloth, although the nylon will do the trick. The material should be cut about one half inch larger all around than the grille of the mike.

The filter material is cemented to a ring of heavy cardboard or metal supported on three or four rods which are attached to the microphone. For complete filtering, the screen must be at least three quarters of an inch from the microphone opening. It is suggested that a mock-up of the actual finished windscreen be made first from materials close at hand, such as wire for the rods which can be taped to the mike and bent over and cemented to the cardboard or metal ring.



In this illustration we see the windscreen attached to the microphone. The finished model will depend upon your individual workmanship, but the value of using the windscreen device will be evident in your first home recording made with it. You will be another step away from an amateurish sounding recording.

necessary is a stretched layer of a gauzy material about one-half inch larger, all around, than the sound opening or grille of your microphone. This may be of metal mesh (not mosquito screen, the holes are too large), fine cloth or stocking material, cemented to a thin ring of cardboard or metal which is in turn supported on three or four rods that are attached to your microphone body. The resulting article will depend to a great extent on the ability of the workman and his ingenuity.

There are only two dimensions that are more or less critical, the size or diameter of the screen, since it must not be small enough to permit any wind to pass around it and impinge on the microphone diaphragm, and the distance from this screen to the microphone surface. It does not matter how close you speak to the screen. It can tickle your lips if you like. But the screen has to be at least three quarters of an inch from the normal opening of the microphone for complete filtering action. This still permits a very close operational approach with excellent noise suppression. The

region on the far side of the screen should not be boxed in but left free and clear, otherwise sound quality will be ruined.

It is suggested that an experimental mock-up of the screen be made first using materials at hand, and when the desirability of the windscreen has been established a more finished and workmanlike job can be constructed. For example, in the first model the supporting wires can be attached to the microphone body with elastic bands or tape and the other ends bent over a little and cemented to the cardboard or metal ring, using glue or household cement.

To prove the value of the device one can first record his voice with the microphone about three-quarters of an inch from his lips, using words containing enough of the sputtering type letters to make the test conclusive. Later after attaching the screen the test is repeated at the same distance and with the same script. A side by side listening test can then be heard. Such a comparison is usually quite impressive.

STEREO SECTION

NEW TAPES

By Georgie Sigsbee

CLASSICAL CONCERTO-RHAPSODY GRIEG

Concerto in A Minor (27:47 mins.)

RACHMANINOFF

Rhapsody on a theme of Paganini (20:30 mins.)

Leonard Pennario, pianist
Erich Leinsdorf conducting the Los Angeles
Philharmonic Orchestra

CAPITOL ZF-85

\$14.95 . . . 48:30 mins.

These two compositions make a well-matched program and are performed with great poetic justice to both composers. Pennario spins a web of gossamer quality across the keyboard in Grieg's romantic, lyrical concerto. Although his touch can be delicate as a butterfly's wing, Pennario does not lack in animation or strength when required. Mr. Leinsdorf and his men also give a laudable performance.

Excellent balance is maintained between orchestra and soloist. The reproduction is not as acutely brilliant as many current releases . . . it has a softer quality . . . somewhat like being in a filled to capacity concert-hall. The piano is placed not too far forward so that it blends with the whole musical team very nicely.

The Rachmaninoff piece is executed most effectively. The second movement in particular is filled with such provocative, beautiful passages that one can be lulled into a most peaceful state of mind.

ORCHESTRAL RAVEL

Bolero

BIZET

L'Arlesienne Suite No. 2

MERCURY MCS5-50

\$11.95 . . . 29:32 mins.

A translucent recording capably conducted by Paray of Ravel's "orchestral tissue without music . . . one long, gradual crescendo"—the "Bolero." Razor-sharp reproduction of this score makes this an

excellent offering. Having heard this so many times I do not get any feeling of tension, etc., but Paray does a fine job of gradually increasing the tone of his orchestra.

The Second L'Arlesienne Suite, compiled posthumously by Bizet's friends, Guiraud, consists of four movements: Bizet's Pastorale; Intermezzo; Minuetto; and Farandole. This particular recording by Paray was made several years ago. While not as ultra-brilliant as the Ravel in reproduction, it is nonetheless very good and the interpretation is unquestionably a very satisfactory one.

HOLST

The Planets

Los Angeles Philharmonic Orchestra

Women's Voices of the Roger Wagner
Chorale

Leopold Stokowski, Conductor

CAPITOL ZF-75

\$14.95 . . . 47:03 mins.

This is just the kind of musical meat Stokowski likes to sink his teeth into . . . and for this I am glad as we have here an outstanding rendition which is given stereo reproduction of the highest quality.

Some years ago when I first heard this composition I was not sure whether I liked it as a whole . . . but the more one listens the more enjoyment comes from hearing the creative scoring of Gustav Holst. The seven movements of this composition are Mars, The Bringer of War; Venus, The Bringer of Peace; Mercury, The Winged Messenger; Jupiter, The Bringer of Jollity; Saturn, The Bringer of Old Age; Uranus, The Magician; Neptune, The Mystic. In Holst's own words . . . "These pieces were suggested by the astrological significance of the planets. . . ."

The orchestration calls for an extremely large abundance of instruments including such items as four flutes, three clarinets, three bassoons, a contrabassoon, four trumpets, three trombones, cymbals, gong, bells, glockenspiel, celesta, two harps, an organ . . . and on and on. Not to men-

tion a women's chorus!

The music, and the display of instrumentation, hold a fascination; ranging from dramatic to serene there is a full cornucopia of music as well as brilliant sound patterns of percussion et al., to please both the musical and/or engineering soul.

RESPIGHI

THE PINES OF ROME

THE FOUNTAINS OF ROME

The Philadelphia Orchestra

Eugene Ormandy, Conductor

COLUMBIA LMB 25

\$11.95 . . . 26 mins.

The outstanding talent of Ottorino Respighi was his proficiency in pictorial writing, or as he himself described it, "to reproduce by means of tone an impression of nature." The Pines of Rome and the Fountains of Rome were his first two great successes in this field and they are presented here in a thrilling performance by Ormandy and the Philadelphians. Every descriptive shading from the laughter of children at play by the pines of the Villa Borghese to the sound of the tolling bells, twittering birds, and rustling leaves at sunset by the Villa Medici Fountain is meticulously painted by Mr. Ormandy just as a master artist would depict these scenes on canvas. The quality of the recorded sound is exceptional and the tape surface very clean and free of hiss.—J.L.

DE FALLA

NIGHTS IN THE GARDENS OF SPAIN

San Francisco Symphony Orchestra, Enrique Jorda, Conductor

Artur Rubinstein, Pianist

RCA CCS-95

\$10.95 . . . 22 mins.

Manuel de Falla's enchantingly beautiful score receives masterful handling by Rubinstein and Jorda in a performance that is truly a gem. Stereophonic sound helps place the piano in its proper relationship as an integral part of the orchestra, rather than as a concerto instrument. Rubinstein plays brilliantly, accenting every

note but never too forcefully. An air of sombre melancholy overlies this mystical tapestry which de Falla has woven from Andalusian folk-tunes. The same themes recur throughout all three movements, portraying Spanish hillside villas, festivals, gypsy dances and nocturnal gaiety. The recording is as fine as this notable performance deserves.—J.L.

SAMUEL BARBER
MEDEA'S MEDITATION AND DANCE OF VENGEANCE
 Boston Symphony Orchestra, Charles Munch, Conductor
 RCA ACS-147
 \$6.95 . . . 12 mins.

Drawn from his ballet score "Medea," which was commissioned for Margaret Graham, this music differs greatly from the style of the lyrical "Adagio for Strings" for which Samuel Barber is better-known. These two excerpts, performed without any time-break between, demonstrate Barber's ability to produce both quiet and dramatic moods in music. "Medea's Meditation" is sensitive, impressionistic music while the "Dance of Vengeance" grows with mounting frenzy to an almost violent conclusion. The large percussion section, brilliantly used, produces a most animated and exciting effect. This is a finely manipulated performance and the engineers have captured in it live and rich recorded sound. In my opinion this could well serve as an introduction to those who have not already become acquainted with modern American symphonic art at its best.—J.L.

TCHAIKOVSKY
 Piano Concerto No. 1
 Van Cliburn, Pianist
 Kiril Kondrashin, Conductor
 RCA ECS-187
 \$14.95 . . . 34:50 mins.

Since the news of the great acclaim given this young American pianist in Russia last Spring, Van Cliburn's first recording has been eagerly awaited by the musical world.

Beyond question this collaboration of Cliburn and Kondrashin is a splendid production. Cliburn is an artist of considerable talent indeed. He plays with a somewhat heavy hand, though never sacrificing command of his instrument. However, for me, this approach to the piano, fine as it is, breaks the spell and I would prefer the delicate handling of the Penarrio-Leinsdorf recording.

The outstanding feature here, in addition to the fresh talent of Van Cliburn, is the excellent orchestral sound from members of the Symphony of the Air (the old Toscanini NBC Symphony) under the Russian Conductor Kiril Kondrashin.—J.L.

GERSHWIN
 Rhapsody in Blue
 Eugene List, Pianist
 Eastman-Rochester Orchestra
 Howard Hanson, Conductor
 MERCURY MWS5-47
 \$6.95 . . . 15:10 mins.

Eugene List gives a deft, agile performance of Gershwin's "symphonic jazz" composition. The tone of the piano is sharp and clear while that of the orchestra

seems just a trifle thick in comparison. Center placement of the solo instrument makes each note struck shine forth with gem-like transparency. The overall effect is well-balanced and this recording could, indeed, be rated above par.

RICHARD WAGNER
DIE MEISTERSINGER VON NURNBERG
 Opera in Three Acts (Concert Version)
 Karl Liebl, tenor
 Jakob Rees, tenor
 Jacob Staempfli, bass
 Uta Graf, soprano
 Anneliese Schlosshauer, mezzo-soprano
 Frankfurt Opera Orchestra and Chorus
 Carl Bamberger, Conductor
 CONCERT HALL RX-62
 \$23.95 . . . 104 mins.

There will be some who are satisfied—some who are not—with the choice of selections recorded in this condensation of Wagner's "Die Meistersinger."

While the concert version lacks something of the action of the staged performance, the excellent placement of the soloists across the stage and the fine stereophonic recording do much to regain the effect. Carl Bamberger leads the orchestra and chorus in a production that is, to me, a sheer delight from start to finish. The soloists are for the most part unfamiliar to me; however each one sings his role competently, particularly Karl Liebl who is a fine "Walther von Stolzing" and Uta Graf who portrays a lovely "Eva" with her light clear soprano voice. The rich sound of the well-disciplined chorus merits special mention. Balance and quality of the recorded sound is, on the whole, very good.

A limited number of German-English librettos were available when this tape was released. Since the libretto adds so greatly to the enjoyment of this recording it would be well for Concert Hall to obtain a sufficient number of copies and include one in each album.—J.L.

ORCHESTRAL
THE ORCHESTRA SINGS

Toreador Song
 Largo Al Factotum
 Vesti La Giubba
 Soldier's Chorus
 La Donna E Mobile
 Pilgrim's Chorus
 Drinking Song
 Amami Alfredo
 M'Appari
 One Fine Day
 Musetta's Waltz
 Capitol Symphony Orchestra
 Carmen Dragon, Conductor
 CAPITOL ZF-83
 \$14.95 . . . 37:46 mins.

Conducting rather luxurious orchestral transcriptions of selections from operatic works, Carmen Dragon again takes the classics and dresses them up (or down depending on individual taste) for perhaps more widespread, popular consumption. Substituting winds and strings for solo voices, Mr. Dragon gives a pretty good accounting with his instrumental versions. I believe he is achieving a very good purpose by familiarizing many listeners with music that they might ordinarily not seek out in its original or complete form.

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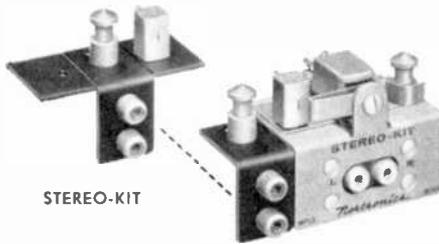
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And so here we have another very fine offering by Carmen Dragon which is recorded with finesse.

CHORAL VIRTUOSOS!

Handel: "Hallelujah Chorus" from the Messiah
Di Lasso: Echo Song
Mozart: "Alleluia" from Exultate Jubilate
Borodin: Dance of the Polovetsian Maidens
Soon I Will Be Done
Polly Wolly Doodle
Orff: "Praelusio" from Catulli Carmina
The Roger Wagner Chorale
CAPITOL ZF-84
\$14.95 . . . 37:47 mins.

A recording which certainly demonstrates the terrific skill and precision of this chorale group. One cannot help but be impressed by the superb artistry of this aggregation. Roger Wagner has taken the "Alleluia," which was originally written for solo voice with accompaniment, and has arranged the women's voices with wood winds and strings to bring forth an unusual, shining rendition. The voices seem to lift you heavenward at the end. Next he weaves voices and orchestra in colorful patterns in the "Polovetsian" number and then turns to a quiet, expressive spiritual. Injecting a bit of humor (I personally would have rather this number been left out as it didn't exactly blend with the others) . . . the chorale gives a brief run-through on "Polly Wolly Doodle." The finale is an excerpt from Orff's trilogy "Trionfi." Not being familiar with the German composer, Orff, I would not want this to serve as an introductory piece. I found this last selection to be exceedingly lengthy, depressing, and somewhat monotonous. Having listened to it many times I came away with one impression . . . Roger Wagner has a magnificently trained choral group!

The fidelity is flawless and with stereo-phonic reproduction this group seems larger than it really is. The recording is an accomplished one with spacious, wide-spread sound.

SHOW TUNES

THE KING AND I
Motion Picture Soundtrack Recording
CAPITOL ZD-76
\$12.95 . . . 45:03 mins.

I would give this a rave notice. It is one of the most delightful "sound track" recordings I have yet to hear. The music is a beautiful example of Rodgers and Hammerstein's expert abilities at both writing musical scores as well as their natural endowments for pure showmanship. For those of you who saw the movie starring Deborah Kerr and Yul Brynner, this will serve to recapture the enchantment evoked by having seen the celluloid production. For those such as myself who did not see the movie, it will suffice as a highly enjoyable forty-five minutes of entertainment through the medium of excellent show tunes accorded equally excellent production and reproduction.

SOUTH PACIFIC
Les Baxter and His Orchestra

CAPITOL ZC-48
\$11.95 . . . 30:47 mins.

Here are fresh, fast-moving productions of thirteen songs from this Rodgers and Hammerstein musical. Baxter has a knack of handling these often heard tunes with a decidedly different air. He utilizes a variety of instruments to produce an originality which is quite refreshing to hear. Flutes, bells, vibes, staccato drumming, etc., create an unusual touch. Some of the rhythms swing and sway, while others have a definite Latin beat and all in all arranger-conductor Baxter comes off with a very appealing recording.

There is a rich bass effect and acoustical reverberance to this release.

MY FAIR LADY

On The Street Where You Live
I've Grown Accustomed to Her Face
With a Little Bit of Luck
I Could Have Danced All Night
The Rain in Spain
Wouldn't It Be Lovely
Show Me
"Radiant Velvet Strings" under the direction of Caesar Giovannini
CONCERTAPES 513
\$7.95 . . . 14 mins.

For those of you who have not had the pleasant opportunity of seeing either the musical or the film "My Fair Lady," this tape will arouse your wish to do so just as soon as possible. The music is delightful and listening to it makes you want to see it performed.

Many of the tunes you probably already know because they have become quite popular. They are of the variety that makes you want to sing along.

The recording is faultless, just a smooth enjoyable flow of well-recorded music, A most worthy addition to any recorded tape library.—J. C.

GIGI SELECTIONS

GiGi
Waltz At Maxim's
Thank Heaven For Little Girls
The Parisians
I Remember It Well
The Night They Invented Champagne
Reprise: GiGi
"Radiant Velvet Strings" featuring Caesar Giovannini at the piano
CONCERTAPES 601
\$7.95 . . . 18:30 mins.

A tape just as pleasing as Concertapes "My Fair Lady" release. The atmosphere effected is definitely French. This is the kind of a tape you can listen to many times without ever becoming tired of it. A flawless recording, and one which we found most listenable.

Caesar Giovannini is a brilliant pianist, and his interpretations of these show tunes are equally brilliant.—J. C.

POPULAR

SONGS FROM GREAT FILMS

Wild Is The Wind
Tammy
Gigi
Love Theme from "Farewell to Arms"
Moonglow and Theme from "Picnic"
Sayonara
The Song from Moulin Rouge

Terry's Theme from "Limelight"
 The Song of Raintree County
 Very Precious Love
 Friendly Persuasion
 Herman Clebanoff and the Clebanoff
 Strings
MERCURY MDS2-35
\$12.95 . . . 35:35 mins.

A very pleasant recording featuring songs which have become very popular since their introduction via the cinema. Smooth-flowing arrangements are ideal for relaxing moments. Sentimental strings are the mainstay though you will hear other instruments adding further touches of color.

Mercury has supplied a tone signal at the beginning of the tape so that one may check to see if both speakers are serving with proper balance. At the conclusion (just in case you have become too relaxed) there is a continuous beep tone to signify the end of the reel. In between the selections there are brief beep tones for locating selections, audible on fast wind or rewind only.

The reproduction is high quality.

ST. LOUIS BLUES—Nat "King" Cole
CAPITOL ZD-59

\$12.95 . . . 33:34 mins.

Nat does a topnotch job in delivering some of the late W. C. Handy's compositions. Singing songs from the film in which he takes the role of Handy, Cole sings with warmth and feeling. You will hear such tunes as "Careless Love," "Beale Street Blues," and "Morning Star." Several others which are not included in the movie are presented here, i.e., "Friendless Blues." The mood is sad, slow, and blue. Nelson Riddle and his orchestra provide nicely integrated accompaniment.

Reproduction is faultless.

**SOMETHING OLD, NEW, BORROWED
 AND BLUE**

The New Glenn Miller Orchestra
 Ray McKinley, Directing
RCA CPS-136

\$10.95 . . . 25:38 mins.

Starting out on the up tempo "Domino" McKinley takes us quickly backward in time to the old Glenn Miller band with the next number "Falling Leaves."

As the title indicates, the selections range from such tunes as "Blue Evening" to "Naughty But Nice." The arrangements are well done and make for some good dancing. Vocals by Lorrie Peters, Ron Craig and McKinley, as well as some verbal intros by McKinley, help to lend a "night out dancing" atmosphere.

The recording is full spread and clean of surface noise.

FIREWORKS

Billy Mure's Super-Sonic Guitars
RCA CPS-135

\$10.95 . . . 25:10 mins.

Once you get beyond the explosive opening (title) number, which by the way the rock 'n roll crowd likes a lot, you will find that this group settles down to playing some lively, spiced-up arrangements of "Peanut Vendor," "By the Beautiful Sea," "They Can't Take That Away From Me," etc.

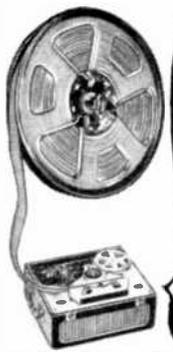
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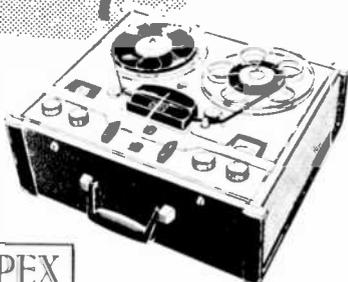
Super tough tape impregnated with special formula cleaner keeps your tape recorder head clean, a **must** for fine performance. No tools . . . no swabbing . . . no need to take your tape recorder apart. Just put the reel on the machine as you would a tape . . . play it through . . . rewind . . . and the head has been cleaned and dried! Can be used over and over. See it at your hi-fi dealer.

Model No. 335, with 100 foot plastic reel, \$2.95 List Price.

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 A Division of Textron Inc.
 ROCKFORD, ILLINOIS, U.S.A.

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STEREO

At No
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AMPEX

First in Stereo For the Home

Now you can add sensational 4-track stereophonic tape recording to your Ampex (A-model) machine for as little as \$75 with exciting new conversion kit, or own a complete new (900 series) unit at last year's price. A new 960 Series is also available for recording Stereo as well as playback. Ampex 4-track head shift is the most advanced design today, capable of playing either present 2-channel or new 4-channel stereo at the flick of a lever . . . also plays them at either 7 1/2 or 3 3/4 inches per second tape speed. It's the recorder of the future and it's yours today.

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75% SAVINGS ON TAPE COSTS
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 New 4-channel head with micro precision gap provides the performance at 3 3/4 inches per second you would normally expect at 7 1/2 inches per second.

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 Our skilled engineers will transform your present Ampex (model A) into the most advanced recorder on the market today for as little as \$75. For full details and **FREE** brochure, write us today. **We specialize in Trade-Ins—Highest Allowances**

BOYNTON STUDIO
 10 Pennsylvania Ave., Dept. HT-A
 Tuckahoe, N. Y. Tel. SP 9-5278

Four guitarists, three drummers, one bass player and eight vocalists are featured in this recording. The latter group add their "do, do, wahs" in about half of the tunes. Three of the numbers are Mure's own compositions.

A bright, reverberant recording.

SATURDAY NIGHT WITH MR. C

Perry Como
 RCA CPS-153
 \$10.95 . . . 25 mins.

Following in the footsteps of his monaural recording "We Get Letters" (RCA AP 59), this session brings another capsule version of Perry's TV show into the home. The opening and closing themes are used and in between Perry sings forth in his, as always, charming, talented manner. Selections range from "Little Man You've Had a Busy Day" and "It Had to Be You" to "Twilight on the Trail." Mitch Ayres and the Ray Charles group lend their familiar, well-trained skills to the overall format.

Now you can enjoy Perry, not just Saturday, but every night of the week if you so desire.

No complaints as to the fidelity.

MEDLEY TIME

Don Baker at the Organ
 CAPITOL ZC-80
 \$11.95 . . . 40:01 mins.

Baker presents twenty-four popular tunes arranged in medley form, i.e., "Heart Medley" ("Love, Here Is My Heart"), "Dawn to Dark Medley" ("Three O'Clock in the Morning") and "Dream Medley" ("I'll See You in My Dreams"). Having played for ten years at the console in New York's Paramount Theater, Baker is definitely in his element. He performs on the instrument with an adept, pleasing touch and without excess display or shenanigans. The organ featured in this recording is of rather grandiose proportions having a total of four manuals and twenty-four ranks involving about two thousand pipes.

If you enjoy organ music with a repertoire of light fare, then this tape is bound to please you.

The reproduction is very good and the sounds from the organ will spread throughout the house.

DANCE BREAK

Mar (Stars in Your Eyes)
 Usted (Tonight I am in Heaven)
 Noche
 De Corazon a Corazon (Heart to Heart)
 Bonita
 Luis Arcarez and His Orchestra
 RCA APS-127
 \$6.95 . . . 16 mins.

Five original compositions acquaint us with two of Mexico's foremost contemporary composers, Gabriel Ruiz and Luis Arcarez. Each of the selections is outstanding and beautiful and the Arcarez Orchestra interprets them handsomely. The result is a most satisfying listening experience.—J.L.

OUT ON A LIMB

Don't Play The Melody
 In A Modal Tone

Sunday, Monday or Always
 Early Duke
 Smoke Gets In Your Eyes
 Pete Rugolo and His Orchestra
 MERCURY MVS3-7
 \$7.95 . . . 18 mins.

More of the unique stylings of Peter Rugolo, this time done as a study in contrasting moods. I find it difficult to understand how the title of the reel was conceived, but one must admit it is different . . . and so are the arrangements, particularly the ever-popular "Smoke Gets In Your Eyes." Recording is tops!—J.L.

LET'S FACE THE MUSIC AND DANCE

Let's Face the Music and Dance
 It Must Be True
 Baby, Won't You Please Come Home
 Dinner for One, Please, James
 When You're Smiling
 Please
 Love Walked In
 That Old Gang of Mine
 Urbie Green, His Trombone and Orchestra
 RCA CPS-125
 \$10.95 . . . 24:75 mins.

Danceable arrangements of several "standards" provide the first recording venture for this band. Urbie Green plays a warm, intimate trombone and his orchestra displays remarkable musical maturity for a young organization.—J.L.

THE COLUMBIA ALBUM OF VICTOR HERBERT

Percy Faith and His Orchestra
 COLUMBIA GCB 31
 \$9.95 . . . 25 mins.

The enchanting melodies of Victor Herbert are a delight in any form and Percy Faith presents a modern treatment which, while interesting, will not, I fear, wear as well as the "old standard" performances of this music on discs. For my taste these arrangements are a little "overdone" considering the music with which we are dealing: e.g. the lush strings in the Italian Street Song or the bright but excessive percussive effects in the Dagger Dance from "Natoma." On the merit side we might say that this is an exceptionally bright and live recording and one which is a real show-piece for the extra dimension of stereophonic sound. The album notes contain an interesting account of the life of the composer.—J. L.

BLACK SATIN

Starlight Souvenirs
 What Is There to Say
 Nothing Ever Changes My Love for You
 The Folks Who Live on the Hill
 If I Should Lose You
 Moon Song
 One Morning in May
 Black Satin
 Medley: As Long As I Live—Let's Live Again
 George Shearing Quintet and Orchestra
 CAPITOL ZC-13
 \$11.95 . . . 30 mins.

To the Shearing quintet has been added the whipped cream of an orchestra which provides the highly caloric (and very popular) dust strings. Billy May and Shearing

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have provided polished arrangements and the overall effect is just as smooth as cream.

In "What Is There to Say" and the final selection, you'll hear more of the familiar quintet sound which has made this group so well liked. Shearing plays the piano with finesse, as always.

The reproduction is faultless.

LOVE IS THE THING

- When I Fall In Love
- Stardust
- Stay As Sweet As You Are
- Where Can I Go Without You?
- I Thought About Marie
- At Last
- It's All In the Game
- When Sunny Gets Blue
- Love Is the Thing

Nat "King" Cole
Gordon Jenkins Orchestra
CAPITOL ZD-11
\$12.95 . . . 27:30 mins.

Singing in his inimitable style, Nat Cole is given spacious, rich orchestral backing by Jenkins and his men. There is one flaw . . . Cole is too closely miked. The "s" and "f" syllables come hissing out . . . especially in "Stay As Sweet As You Are." The strived-for effect of small club intimacy does not particularly go with the full orchestra background. Nonetheless, Cole's fans will welcome this taping.

BILLY'S BEST

- Boulevard of Broken Dreams

You Don't Know What Love Is

- Babalu
- Stella By Starlight
- Where Have You Been
- Zing! Went the Strings of My Heart

Billy Eckstine
MERCURY MVS2-22
\$7.95 . . . 19:23 mins.

Slow, mellow vocalizing by Eckstine backed by an unnamed orchestra. In this, his first live stereo solo, the mood is relaxed; even "Babalu" is given an unhurried Latin beat.

Eckstine was placed about 15 feet in front of the musicians and with the aid of four mikes, plus the two standard mikes for stereo pickup, Mercury comes forth with a recording of high standards and resonance.

If you are an Eckstine fan, you won't want to miss this tape.

MUSIC FOR DINING

- Diane
- Too Young
- September Song
- Clopin Clopant
- Warsaw Concerto
- Domino
- Charmaine
- Melachrino and His Orchestra
- RCA CPS-144

\$10.95 . . . approx. 27 mins.

These selections are imbued with the, by now familiar, romantic orchestrations of George Melachrino. Suitable enough to ease any tensions during the dinner hour . . . or any time.

The engineers were certainly not out to dinner during this one and have come through with very good stereo sound.

DANCING THROUGH SPACE

- The Surrey with the Fringe on Top
- Tea for Two
- Too Young
- It's Delovely
- Through the Years
- Lullaby of Birdland
- Arabian Nights
- Music, Music, Music
- Haywood's Beguine
- Struttin' with Some Barbecue
- A Stereo Dance Holiday with 10 Name Bands
- RCA CPS-143
- \$10.95 . . . 25:25 mins.

A good cross-section of top dance bands. Although in a sense this is a demonstration record advertising the ten albums from which the numbers have been taken, it nevertheless makes up an excellent half hour of party music. The variety supplied by the different styles and arrangements gives a fresh touch to this release. You may find yourself anxious to get some of the complete albums which certainly wouldn't make RCA or their artists in the least angry!

In the order of their appearance you will hear Sauter-Finegan, Tito Puente, Melachrino, Skitch Henderson, Mitch Ayres, Ray McKinley, Frankie Carle, The Three Suns, Eddie Heywood and Bob Scobey's Frisco Jazz Band.

The reproduction is of high quality.

Websters are MADE FOR EACH OTHER



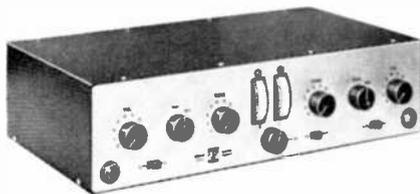
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A Webster advantage that gives you superb reproduction, professional results. Ekotape components

feature a minimum of controls, precise operation, compact design . . . compliment the finest custom installation. Finished attractively in gold and black.



MODEL 55694A

STEREO TAPE DECK — One of the finest, most precise tape handling mechanisms in the industry. Gives you Webster's acclaimed "true-life" stereo reproduction. Easy to install and operate. Features in-line heads . . . one central control to eliminate tape loops. Off/on switch and speed control are combined to neutralize tape mechanism when in "off" position. With an Ekotape 55694A preamp, and power amplifiers, it is possible to record and play back stereo as well as monaural sound. One or both channels can be erased. Two models — 340 (as shown) just \$99.50. Deluxe (Model 342) with tape-out switch and program selection-finder, slightly higher.

STEREO RECORD-PLAYBACK PREAMP — Complete dual channel control center for stereo recording, erasing and playback. Volume control, record/playback switch and speed compensation switch for each channel; erase switch and on/off switch. Tone controls do not affect preamplifier during recording. Professional VU meter for each channel permits equalizing settings in both record and playback positions. Six inputs, 4 outputs. Signal to noise ratio: 45db. Frequency response: 30 to 15,000 cycles.



MODEL 55693 A

STEREO PLAYBACK PREAMP — provides dual-channel volume and speed compensation controls . . . equalizes stereo playback when tape deck is installed in existing hi-fi sets. Signal to noise ratio: 45db. Frequency response: 30 to 15,000 cycles. Cinch-type input connector from tape deck head for each channel.

See the Yellow Pages for your Ekotape dealer, the man from Webster. Ask him to show you these Webster stereo components . . . Fidelity-Matched for the best in stereo! Write direct for complete specifications and illustrated catalog.

ELECTRONICS DIVISION
WEBSTER  **ELECTRIC**
RACINE - WIS

ELLINGTON INDIGOS

Prelude to a Kiss
Solitude
Where or When
Mood Indigo
Tenderly

Duke Ellington and His Orchestra

COLUMBIA GCB 18

\$10.95 . . . 26 mins.

These familiar standards (styled for dancing) are presented in a fluid, polished fashion. Featured in the five numbers are: 1. Johnny Hodges on sax, 2. The Duke at the keyboard, 3. Paul Gonsalves on sax, 4. Shorty Baker on trumpet and 5. Jimmy Hamilton on clarinet.

The recording is impeccable. The selections are in order on the front of the box but not in the notes.

JAZZ

JAZZ FROM NEW YORK

Bill Bailey

J. C. Jump

Featuring: J. C. Higginbotham, Trombone; Coleman Hawkins, Tenor Sax; Buster Bailey, Clarinet; Joe Thomas, Trumpet; Al Williams, Piano; Eddie Bourne, Drums; Benny Moten, Bass.

STEREO AGE J-1

\$7.50 . . . 16 mins.

Boasting some of the biggest names in current jazz artistry, this tape reveals the soul of New York "bed-rock" jazz . . . loud, hot, and with a frantic beat. The recording is fine . . . perhaps a little distant, but careful placement of the soloists has helped to maintain good balance. Stereo Age is to be congratulated on their sturdy and attractive package; a further improvement would be to put labels on their reels.—J.L.

MISCELLANEOUS

MUSIC FOR NON-THINKERS

Guckenheimer Sour Kraut Band

RCA CPS-133

\$10.95 . . . 27:02 mins.

These men, who in actuality are very good musicians, proceed to rear apart with fiendish glee such compositions as Liszt's "Second Hungarian Rhapsody," "Jägermarsch," the "Raymond Overture" and "Trinklieder."

Have your sense of humor handy and you'll thoroughly enjoy this tape. Begin by reading the notes on the box, including the names of the "artists," and you will surely find yourself laughing before you even hear these musical misinterpretations. The band leader, Herr Doktor Guckenheimer is, in reality none other than Richard Gump of Gump's Department Store in San Francisco. He is also an author and serious composer. One of his less serious contributions to music appears as the final number, "Come Vere the Band 1st Playing."

Recorded in the Steuben Room of the department store, the acoustics prove to be most worthy and the engineers have turned in a clear-cut record.

For special "mad" moments or any a "too seriously inclined toward music," friend.

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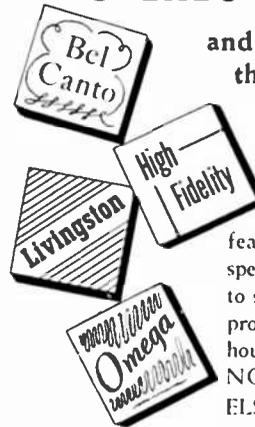
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(Wurlitzer Organ) #15006

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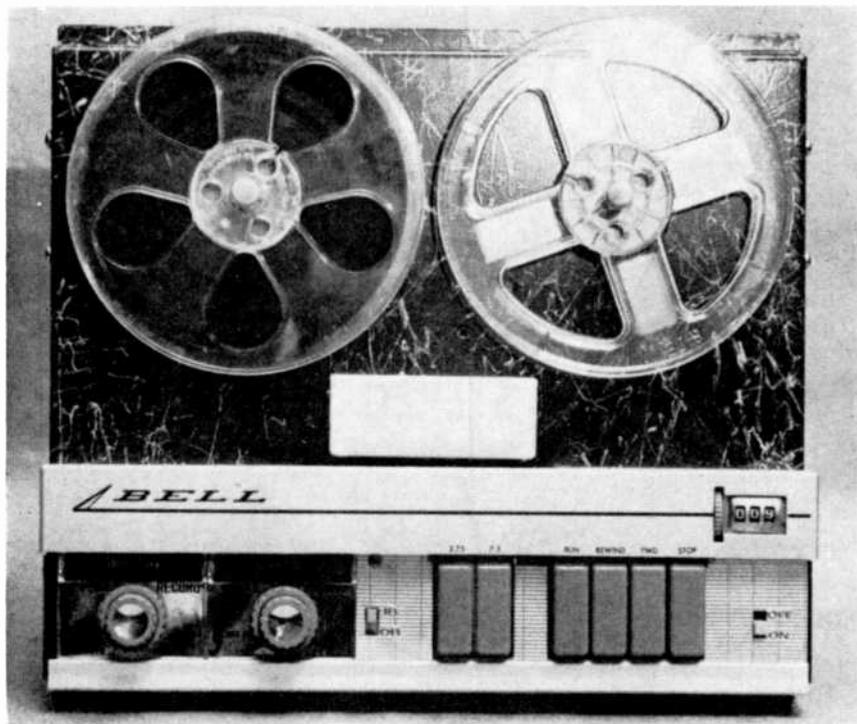
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Make of Record Player _____ Make of Tape Recorder _____

Please send additional information concerning the Society.

NEW PRODUCT REPORT



BELL TAPE DECK AND STEREO AMPLIFIER

... adaptable from straight monaural to stereo record and playback.

THE Bell Series 200 tape deck and the 3030 amplifier are a ham and eggs combination although either may be used with existing equipment.

The deck is available in a number of head configurations: monaural erase, record/playback; stereo inline/offset with monaural playback only; monaural erase, record and playback, and stereo inline/offset playback or monaural erase, record and playback and stereo erase, record and playback.

At the present time, two track heads are incorporated in the decks and Bell has announced that it will make four track heads available when there are four track tapes on the market to play on them.

Two preamplifiers are companion pieces to the deck and are designed to become an integral part of it. One is the RP-120 record and playback amplifier and the other is the P-100 playback only amplifier.



The Bell 3030 stereophonic amplifier is shown above. Rated at 15 watts on each channel, it can carry peaks of 60 watts. Variety of controls offers unlimited possibilities to sound diddlers.

STAFKSTED

Product: Bell Tape Deck and Stereo Amplifier

Manufacturer: Bell Sound Systems, 555 Marion Rd., Columbus, Ohio

Price: Deck \$149.95; Amplifier \$169.95; RP-120 \$59.95.

A deck equipped with the record/playback amplifier will record and play in standard dual track fashion. If equipped with the proper heads and an additional playback amplifier, then monaural record and playback plus stereo playback is possible.

If the deck is equipped with two record and playback amplifiers, then it can be used to record and playback stereo as well as monaural tapes.

A deck equipped with two playback amplifiers only will play back monaural or stereo tapes but will not record.

The deck is well made and attractively finished. It features three, four-pole motors which directly drive the mechanism. There are no belts, pulleys, clutches or mechanical brakes in the unit. The tape stoppage is accomplished with electrical braking.

Controls are piano-key type and all operations between modes should go through the stop key first. The unit has a tape lifter to keep the tape away from the heads during stop and fast forward or rewind.

An odometer-type counter is incorporated and this is driven from the take-up reel to avoid the introduction of wow and flutter.

To make a portable recorder out of the deck and amplifiers, Bell has available a carrying case in which the unit may be installed.

For home use, the deck can be mounted on a wooden panel or in a cabinet.

The installation of the selected preamplifiers is simple and can be done by anyone with a bit of mechanical aptitude. Provision is made on the rear of the deck for plugging in the power cords of the preamplifiers. Color coded leads are used to make the head connections.

The deck performed satisfactorily under test and it may be mounted

either horizontally or vertically. When mounted vertically, rubber spindle caps are used to prevent the reels from falling off.

Two pilot lights and a modulation level indicator are incorporated above the knob of the preamplifier. In playback the blue light is on, in record the red. As there is no interlock between the preamps and the deck, care must be taken to make sure that the record function is off when running in rewind or fast forward or partial erasure of the tape may result. A keyhole-shaped cathode ray indicator is used for volume control. These are sensitive indicators and work well.

Two inputs, one for microphone and one for radio are built into the preamps. Their output can be taken to any high quality amplifier.

Frequency response at the 7½ ips speed was as specified and is very satisfactory.

The 3030 amplifier is a stereo unit with an output of 15 watts per channel, a total of 30 watts, and it can handle peaks to 60 watts.

Inputs are provided on the back of the chassis, each with a left and right channel for: tape head, magnetic phono, ceramic phono, tuner and an auxiliary.

The controls include: a function selector switch (Tape, EUR, RIAA, LP, Tuner and Aux.) The noise filter cuts off at 4000 cps on the high side or 40 cps on the low to allow the filtering of turntable rumble or record scratch. The balance control is combined with the stereo-monaural switch. The loudness control is continuously variable and is combined with the push-pull, power on-off switch. The level control is combined with the stereo reverse function. The bass control gives a 15 db boost or a 20 db cut at 50 cps. and the treble control is capable of a 16 db cut or 12 db boost at 10,000 cps.

The unit contains 11 tubes within its small case which measure only 4¾" high by 16 inches long by 11 inches deep.

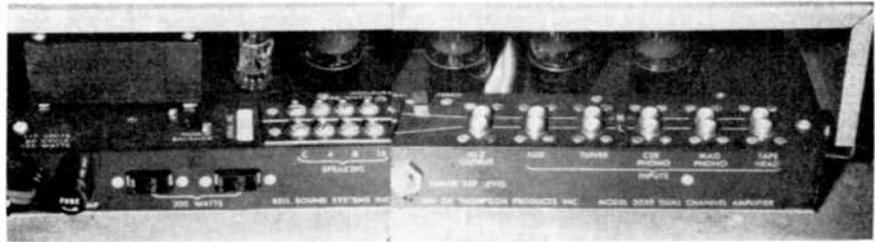
This is a very attractive amplifier with very good performance. Its multiplicity of controls permits almost anything the listener wants to do to the sound from his tape or turntable.

The balance control shifts the level between the two speakers and the loudness control reduces the middle

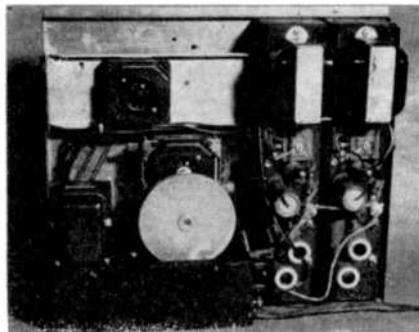
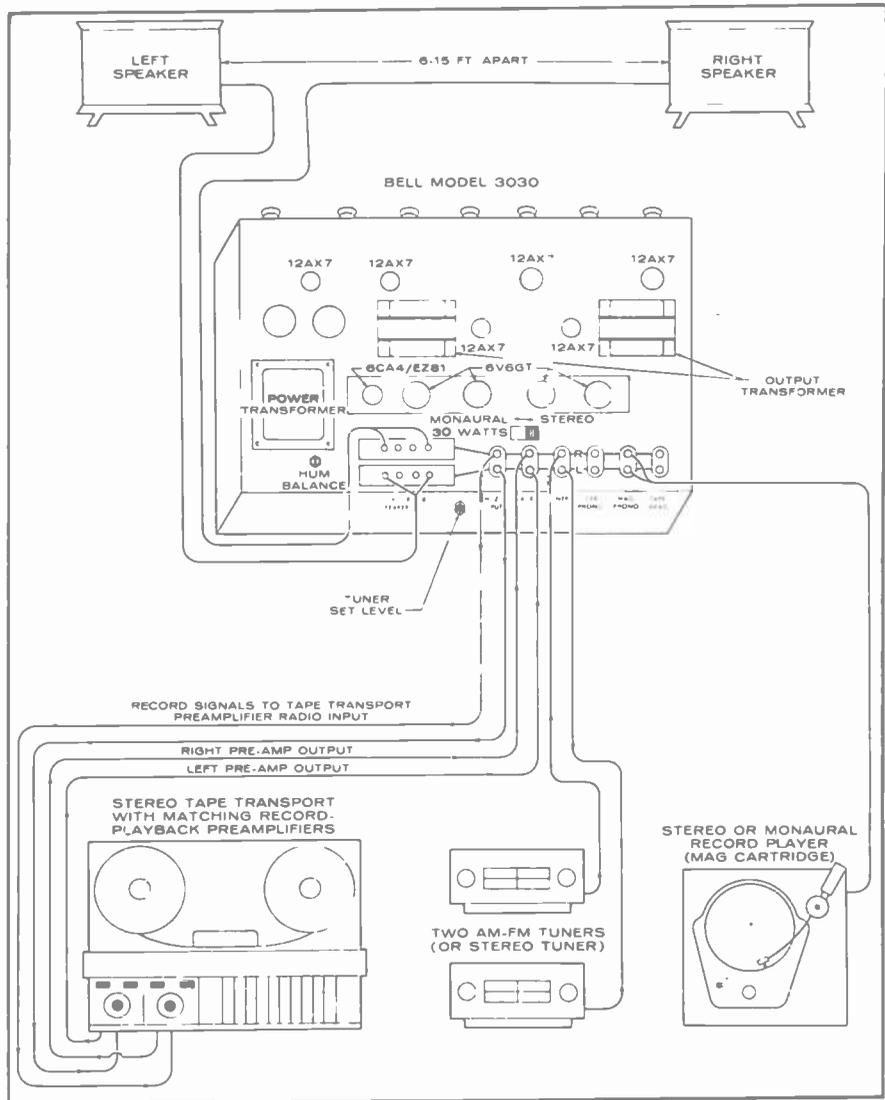
frequencies, to which the ear is most sensitive, more than the high or low end, when the volume is turned down. This permits adequate response and better listening at low levels of output.

The combined level and stereo reverse control will shift the sound from one channel to the other.

The unit is designed for open operation and if placed in confined spaces adequate space for ventilation to dissipate the heat should be allowed.



Above: rear view of amplifier showing inputs and outputs. The unit contains 11 tubes. Below: possible hookups for tape deck and amplifier plus associated equipment.



Rear view of tape deck showing three motors. Preamps are mounted at right side in picture. Deck has no belts, pulleys or clutches.

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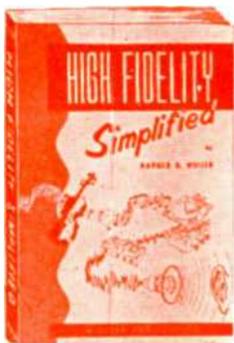
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